THE FIRE MARSHAL

FOR THE PROVINCE OF BRITISH COLUMBIA

THIRTY-EIGHTH

ANNUAL REPORT

STATISTICS, 1959

Printed by Printer to the Queen's Most Excellent Majesty
in right of the Province of British Columbia.
1961

To Major-General the Honourable GEORGE RANDOLPH PEARKES,
V.C., P.C., C.B., D.S.O., M.C.,
Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present the Thirty-eighth Annual Report of the Fire Marshal for the year ended December 31st, 1959.

ROBERT W. BONNER,
Attorney-General.

Victoria, B.C., January, 1961.

TABLE OF CONTENTS

	Page
Report of the Fire Marshal	5
Table I.—Fire Investigations Made by the Office of the Fire Marshal	7
Table II.—Inspections Made and Orders Issued by Local Assistants to the Fire Marshal	8
Table III.—Fires Reported	10
Construction of Buildings Burned	12
Table IV.—Causes of Fires	12
Table V.—Classification of Property Burned and Causes	14
Table VI.—Summary	29
Table VII.—Ten-year Comparative Statement of Fire Losses	30
Table VIII.—Loss of Life, 1950–59	31
Table IX.—Twenty-year Fire-loss Graph	32

REPORT OF THE FIRE MARSHAL

OFFICE OF THE FIRE MARSHAL,
VANCOUVER, B.C., March 31st, 1960.

The Honourable Robert W. Bonner, Q.C.,
Attorney-General, Victoria, B.C.

SIR,—I beg to submit herewith the Thirty-eighth Annual Report of the Fire Marshal for the year ended December 31st, 1959.

I regret to report an increase in the fire loss for the Province. There were 8,268 fires, with a loss of $14,859,552, which is an increase of 205 fires and $2,157,158 over that of 1958. However, we attribute this, in part, to a more complete reporting of fires in the unorganized districts. During the year there were thirty-seven fires with a loss of over $50,000 each, making a total of $4,496,552, and the greater number of these were in our unorganized districts. It is with greater regret that I report an increase in the deaths caused by fire. Fire took eighty-six lives during the year—forty-seven men, nine women, and thirty children. Smokers' carelessness continues to be our leading cause of fire and was responsible for fifteen deaths, while carelessness with inflammable liquids accounted for fifteen deaths. We feel that fire-prevention education, together with vigorous enforcement of the *Fire Marshal Act* and regulations by the Local Assistants, is still the most effective method of reducing these losses.

As in 1958, various municipalities co-operated to the fullest extent in sending their Local Assistants to Vancouver for courses of instruction, where more than 100 received training during the year. There is little doubt that the effect of this type of training will show more and more as instruction continues.

There has been a marked increase in the use of radioactive materials throughout the Province, with the result that requests to this office from fire departments for instruction in the control of this hazard have kept qualified staff instructors busy taking specialized courses in order to keep up to date.

During the year minor amendments were made to the Oil-burner Regulations, the Theatre Regulations, the Inflammable Liquids Regulations, the Hall Regulations, the Chimney Regulations, and the Fire-alarm Regulations.

Referring to Table I, it will be noted that 293 fire investigations have been made by members of the staff during the year. As a result of these investigations, there were forty-two charges laid involving thirty-five persons, with twenty-four convictions, seven acquittals, four mentally unfit to stand trial, and two adjournments *sine die*. During the year there were seventeen prosecutions under the *Fire Marshal Act* and regulations passed pursuant thereto, with fourteen convictions and three dismissals. Twenty-three appeals from orders issued by Local Assistants to the Fire Marshal were heard and decisions given. There were no petitions to the Courts from decisions of the Fire Marshal.

Our Inspectors continue to assist Local Assistants in their inspection work. Inspections made by Local Assistants to the Fire Marshal, as shown in Table II, were 91,330 for the year.

Our Travelling Fire Department Instructional Unit gave instruction to sixty-nine departments, with a total of 1,088 firemen receiving training.

During the year eighteen projectionist examinations under the Theatre Regulations were held. It will be noted that the number of examinations are less than

previous years, and this we attribute to the depressed state of the theatre industry, whereby an increasing number of theatres are being closed.

Throughout the year 439 plans for new construction and alterations to existing buildings have been checked and approved or changes requested. These plans included all types of public buildings, bulk-storage plants for inflammable liquids, liquefied petroleum and natural-gas plants, hospitals, theatres, clinics, and assembly halls.

In 1958 I reported the establishment of a branch of the Institution of Fire Engineers of Great Britain, the only professional fire engineering organization in Canada. I am pleased to report that in 1959 there were thirty-two students registered for instruction. Examinations are held each February at the University of British Columbia.

The Fire Marshal and staff had a busy year with meetings in fire prevention, members attending and giving assistance to the following: The Greater Vancouver Fire Protection Association, committees of the National Research Council, the British Columbia Safety Council, the Fire Advisory Council, the Emergency Measures Organization (Ottawa), fire defences of the metropolitan area of Vancouver, and many others. We have tested fire apparatus for various municipalities on request, assisted in the enactment of local fire-prevention by-laws, and provided engineering advice covering the entire field of fire protection. Information regarding the strength of the fire defences of the Province, required by the Army in its responsibility toward national survival, has been provided, and we continue to maintain liaison with many public and private organizations in the work of fire prevention.

I would like to take this opportunity to thank the members of the various fire and police departments, the British Columbia Research Council, the National Harbours Board, the civil defence organizations, and my own staff for their excellent help and co-operation during the year. Also, may I include the members of the Royal Canadian Mounted Police in the Province, Local Assistants to the Fire Marshal, and insurance companies and their adjusters for their co-operation.

I have the honour to be,

Sir,

Your obedient servant,

BASIL NIXON,

Fire Marshal.

TABLE I.—FIRE INVESTIGATIONS MADE BY THE OFFICE OF THE FIRE MARSHAL

Number of Fires Investigated

Origin of fires—	
Unknown	77
Accidental or negligent	119
Incendiary	97
Total	293

Number of Charges Laid

	Adults	Juveniles
Arson	17	8
Setting fire to other substances	4	4
Mischief	2	6
Other fire crimes	1	----
Totals	24	18

Grand total, 42.

Number of Persons Charged

	Adults	Juveniles
Convicted	8	13
Acquitted	7	----
Stay of proceedings	----	3
Mentally unfit to stand trial	4	----
Totals	19	16

Grand total, 35.

TABLE II.—INSPECTIONS MADE AND ORDERS ISSUED BY LOCAL ASSISTANT FIRE MARSHALS

City Municipalities (32)

	Inspections	Orders		Inspections	Orders
Alberni	—	—	New Westminster	5,576	116
Armstrong	66	—	North Vancouver	2,298	10
Chilliwack	197	6	Penticton	—	—
Courtenay	40	—	Port Alberni	172	2
Cranbrook	636	5	Port Coquitlam	14	—
Dawson Creek	808	8	Port Moody	—	—
Duncan	48	—	Prince George	875	—
Enderby	4	2	Prince Rupert	—	—
Fernie	59	2	Revelstoke	132	—
Grand Forks	—	—	Rossland	—	—
Greenwood	—	—	Trail	1,846	2
Kamloops	377	—	Vancouver	38,313	37
Kelowna	1,116	—	Vernon	256	—
Kimberley	535	8	Victoria	11,248	—
Langley	36	2	White Rock	89	9
Nanaimo	1,228	—			
Nelson	821	64	Totals	66,790	273

District Municipalities (30)

Burnaby	7,001	9	North Vancouver	872	4
Central Saanich	78	5	Oak Bay	2,548	11
Chilliwhack	482	—	Peachland	—	—
Coldstream	—	—	Pitt Meadows	—	—
Coquitlam	—	—	Powell River	248	6
Delta	629	16	Richmond	198	1
Esquimalt	217	—	Saanich	425	84
Fraser Mills	—	—	Salmon Arm	—	—
Glenmore	—	—	Spallumcheen	—	—
Kent	—	—	Sumas	—	—
Kitimat	2,941	—	Summerland	—	—
Langley	—	—	Surrey	1,365	1
Maple Ridge	—	—	Tadanac	53	3
Matsqui	—	—	West Vancouver	171	—
Mission	—	—			
North Cowichan	114	1	Totals	17,342	141

Town Municipalities (3)

Fort St. John	—	—
Mission City	—	—
Quesnel	—	—

TABLE II.—INSPECTIONS MADE AND ORDERS ISSUED BY LOCAL ASSISTANT FIRE MARSHALS—*Continued*

Village Municipalities (58)

	Inspections	Orders		Inspections	Orders
Abbotsford	—	—	Montrose	64	—
Alert Bay	—	—	New Denver	15	—
Ashcroft	19	—	North Kamloops	55	—
Burns Lake	—	—	Oliver	—	—
Campbell River	627	29	Osoyoos	—	—
Castlegar	12	—	Parksville	10	—
Chapman Camp	—	—	Pemberton	—	—
Comox	65	—	Pouce Coupe	—	—
Creston	36	11	Princeton	466	2
Cumberland	65	2	Qualicum Beach	—	—
Fort St. James	—	—	Salmo	14	—
Fruitvale	—	—	Salmon Arm	—	—
Gibsons Landing	—	—	Sechelt	—	—
Golden	—	—	Sidney	—	—
Harrison Hot Springs	—	—	Silverton	—	—
Hazelton	—	—	Slocan	—	—
Hope	—	—	Smithers	—	—
Houston	—	—	Squamish	—	—
Invermere	7	—	Stewart	9	—
Kaslo	—	—	Taylor	—	—
Keremeos	—	—	Telkwa	—	—
Kinnaird	48	—	Terrace	168	20
Ladysmith	—	—	Tofino	—	—
Lake Cowichan	5	1	Ucluelet	—	—
Lillooet	—	—	Vanderhoof	20	4
Lumby	33	—	Warfield	23	—
Lytton	—	—	Williams Lake	50	2
McBride	—	—	Zeballos	2	—
Marysville	181	—			
Merritt	—	—	Totals	1,994	71

Fire Districts (19)

Cariboo, County of	75	—	Prince Rupert, County of	22	3
Colwood	—	—	Sooke	—	—
District Lot 172	—	—	University Area	3,056	—
Ioco	—	—	Vancouver, County of	253	—
Kelowna	—	—	Vernon	—	—
Kootenay, County of	60	5	Victoria, County of	—	—
Langford	48	—	View Royal	—	—
Nanaimo, County of	39	2	Westminster, County of	—	—
Ocean Falls	1,583	—	Yale, County of	68	3
Prince George	—	—			
			Totals	5,204	13

	Inspections	Orders
Grand totals, 1959	91,330	498
Grand totals, 1958	91,959	647
Grand totals, 1957	86,684	975
Grand totals, 1956	80,145	875
Grand totals, 1955	78,523	825
Grand totals, 1954	78,284	801
Grand totals, 1953	78,885	562
Grand totals, 1952	80,573	345
Grand totals, 1951	82,321	644
Grand totals, 1950	82,526	1,206

TABLE III.—FIRES REPORTED

City Municipalities (32)

District Reporting	Number	Amount of Loss	District Reporting	Number	Amount of Loss
Alberni	28	$9,351	New Westminster	205	$124,248
Armstrong	9	2,100	North Vancouver	137	82,976
Chilliwack	29	17,989	Penticton	71	22,274
Courtenay	25	21,160	Port Alberni	79	130,358
Cranbrook	28	197,570	Port Coquitlam	27	31,356
Dawson Creek	49	37,328	Port Moody	15	48,401
Duncan	26	4,992	Prince George	69	205,405
Enderby	7	1,657	Prince Rupert	61	116,543
Fernie	4	204,309	Revelstoke	18	44,992
Grand Forks	6	13,965	Rossland	17	14,569
Greenwood	1	50	Trail	45	9,486
Kamloops	39	100,942	Vancouver	2,309	3,350,528
Kelowna	79	50,493	Vernon	54	45,589
Kimberley	24	12,256	Victoria	470	159,151
Langley	15	26,299	White Rock	30	3,362
Nanaimo	82	32,118			
Nelson	39	239,535	Totals	4,097	$5,361,352

District Municipalities (30)

Burnaby	456	$191,939	North Vancouver	189	$92,422
Central Saanich	14	11,617	Oak Bay	139	34,461
Chilliwhack	74	412,108	Peachland	3	162,858
Coldstream	3	6,320	Pitt Meadows	3	1,174
Coquitlam	98	61,689	Powell River	58	22,506
Delta	49	35,199	Richmond	178	561,447
Esquimalt	74	82,063	Saanich	334	135,444
Fraser Mills	------	----------	Salmon Arm	13	94,639
Glenmore	8	1,164	Spallumcheen	8	53,232
Kent	6	17,493	Sumas	11	10,692
Kitimat	42	79,851	Summerland	11	4,337
Langley	43	88,395	Surrey	331	468,631
Maple Ridge	45	74,321	Tadanac	33	60,906
Matsqui	33	44,526	West Vancouver	177	99,959
Mission	24	69,014			
North Cowichan	30	47,736	Totals	2,487	$3,026,143

Town Municipalities (3)

Fort St. John	10	$49,767
Mission City	8	41,482
Quesnel	27	96,139
Total	45	$187,388

TABLE III.—FIRES REPORTED—*Continued*

Village Municipalities (58)

District Reporting	Number	Amount of Loss	District Reporting	Number	Amount of Loss
Abbotsford	6	$495	Montrose	2	$61
Alert Bay	.....	.....	New Denver	5	49,636
Ashcroft	.....	.....	North Kamloops	14	51,599
Burns Lake	10	201,106	Oliver	9	6,255
Campbell River	27	12,550	Osoyoos	5	769
Castlegar	6	1,104	Parksville	4	17,656
Chapman Camp	2	571	Pemberton	2	14,775
Comox	11	8,667	Pouce Coupe	.....	.....
Creston	9	15,020	Princeton	8	4,088
Cumberland	7	1,885	Qualicum Beach	8	807
Fort St. James	4	13,661	Salmo	4	5,086
Fruitvale	2	1,899	Salmon Arm	9	3,873
Gibsons Landing	11	28,678	Sechelt	5	1,989
Golden	5	3,795	Sidney	8	2,946
Harrison Hot Springs	3	3,323	Silverton	.....	.....
Hazelton	.....	.....	Slocan	2	412
Hope	13	12,388	Smithers	6	4,180
Houston	2	13,250	Squamish	2	196
Invermere	1	50	Stewart	1	350
Kaslo	.....	.....	Taylor	4	25,157
Keremeos	2	323	Telkwa	2	2,849
Kinnaird	4	1,350	Terrace	28	198,208
Ladysmith	17	11,287	Tofino	1	151
Lake Cowichan	7	2,246	Ucluelet	5	4,838
Lillooet	9	29,919	Vanderhoof	12	49,317
Lumby	7	6,594	Warfield	4	22,121
Lytton	1	50	Williams Lake	18	171,139
McBride	2	650	Zeballos	.....	.....
Marysville	7	2,849			
Merritt	7	33,672	Totals	350	$1,045,840

Fire Districts (19)

Cariboo, County of	309	$1,785,002	Sooke	2	$135
Colwood	15	6,813	University Area	17	5,436
District Lot 172	4	1,253	Vancouver, County of	79	417,436
Ioco	.....	.....	Vernon	.....	.....
Kelowna	24	78,558	Victoria, County of	86	290,994
Kootenay, County of	138	707,471	View Royal	18	2,907
Langford	31	13,968	Westminster, County of	47	505,679
Nanaimo, County of	237	657,605	Yale, County of	207	534,057
Ocean Falls	9	18,506			
Prince George	.....	.....	Totals	1,289	$5,238,829
Prince Rupert, County of	66	213,009			
			Grand totals	8,268	$14,859,552

TABLE III.—FIRES REPORTED—*Continued*

Construction of Buildings Burned

	Number	Amount of Loss
Fire-resistive—		
City municipalities	15	$31,182
District municipalities	16	4,585
Town municipalities	----	----
Village municipalities	----	----
Fire districts	3	5,889
Brick, concrete, or heavy timber—		
City municipalities	265	1,248,440
District municipalities	51	551,334
Town municipalities	1	800
Village municipalities	8	7,964
Fire districts	10	85,662
Wood frame—		
City municipalities	3,212	3,856,296
District municipalities	2,076	2,286,349
Town municipalities	37	184,593
Village municipalities	299	962,651
Fire districts	960	4,562,783
Metal or corrugated iron—		
City municipalities	605	225,434
District municipalities	344	183,875
Town municipalities	7	1,995
Village municipalities	43	75,225
Fire districts	316	584,495
Totals	8,268	$14,859,552

TABLE IV.—CAUSES OF FIRES

Causes of Fires	Total Number		Amount of Loss	
Aeroplane crash		1		$500
Boilers or boiler-pipes defective or overheated		4		1,522
Candles and open flames		51		27,971
Children playing with fire		15		3,665
Chimneys—				
Defective or overheated	180		$213,757	
Sparks from	80		61,865	
		260		275,622
Collision		11		10,782
Defective battery connection		6		2,049
Defective brooder		8		4,760
Defective muffler		4		704
Defective oven		2		248
Defective wiring		81		123,184
Dust explosion		6		24,107
Electrical appliances and equipment (improper use of appliance or defective equipment)		452		266,107
Electrical wiring overloaded		6		9,506
Electro-welding equipment, sparks from		2		4,801
Engine back-firing		100		87,465
Exposure		178		643,444
Fireplaces—				
Defective	24		$8,562	
Sparks from	256		36,337	
		280		44,899
Fireworks		60		25,089
Friction—				
In brake-drum	8		$4,357	
In conveyer-belt	2		52,065	
In machinery	9		25,696	
In pulley	1		10,229	
In tires	14		16,479	
		34		108,826
Furnaces or furnace-pipes—				
Combustible materials too near	22		$22,853	
Defective	15		88,255	
Insufficiently protected	43		62,325	
Sparks from	13		27,079	
Upset	1		11,000	
		94		211,512

TABLE IV.—CAUSES OF FIRES—*Continued*

Causes of Fires	Total Number		Amount of Loss	
Gas, liquefied petroleum—				
Explosion	12		$13,087	
Improper installation of appliance	2		16,190	
Improper use of or defective equipment	17		56,616	
		31		$85,893
Gas, natural—				
Explosion	11		$15,248	
Improper installation of appliance	4		528	
Improper use of or defective equipment	7		10,466	
		22		26,242
Gasoline—				
Broken line	38		$41,877	
Carelessness with	82		138,756	
On exhaust-pipe	24		16,324	
Pump damaged by motor-vehicle	3		1,070	
Stoves, lamps, torches	19		63,756	
Used in cleaning	3		2,502	
Used to kindle fire	2		5,150	
Vapour explosion	58		126,789	
		229		396,224
Heat radiation		11		1,373
Hot ashes, coals, etc.		40		11,372
Hot grease, oil, tar, etc., ignition of		343		163,130
Incendiary		97		653,347
Inflammable vapours, ignition of		34		39,553
Kerosene—				
Carelessness with	3		$8,464	
Stoves, lamps, torches	8		9,678	
Used to kindle fire	1		413	
		12		18,555
Lightning		10		12,067
Matches—				
Carelessness with	65		$30,410	
Matches, children with	212		118,060	
		277		148,470
Molten metal		14		22,492
Motor-vehicle upset		19		44,610
Oil-burners—				
Defective	80		$101,557	
Defective equipment	24		46,829	
Explosion	62		64,840	
Sparks from	4		2,265	
		170		215,491
Oxy-gas welding or cutting equipment—				
Carelessness with	16		$14,436	
Defective	1		106	
Sparks from	45		440,770	
		62		455,312
Short circuit		571		851,009
Smokers' carelessness—				
In bed	271		$49,979	
In the home	2,107		264,032	
In public premises	8		3,315	
In unlisted locations	643		484,302	
While intoxicated	4		5,266	
		3,033		806,894
Sparks from bonfire		88		403,736
Sparks from bush fire		6		567
Sparks from engine		5		2,841
Sparks from grinder		3		6,190
Sparks from mill burner		27		657,241
Spontaneous ignition		25		66,124
Steam-pipe insufficiently protected		1		150
Stoves or stove-pipes—				
Combustible materials too near	156		$73,678	
Defective	21		39,199	
Explosion	10		21,587	
Insufficiently protected	139		326,659	
Sparks from	41		34,264	
		367		495,387
Sulphur, ignition of		1		2,114
Thawing pipes		22		224,678
Unknown		1,093		7,171,727
Totals		8,268		$14,859,552

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES

Property		Causes		Amount of Loss	
Aircraft	1	Aeroplane crash	1		$500
Apartments	318	Candles and open flames	4	$466	
		Children playing with fire	1	202	
		Chimneys—			
		Defective or overheated	10	2,233	
		Sparks from	10	3,694	
		Defective wiring	2	351	
		Electrical appliances	8	626	
		Electrical wiring overloaded	1	9,174	
		Exposure	12	17,544	
		Fireplaces—			
		Defective	3	968	
		Sparks from	2	77	
		Furnaces or furnace-pipes—			
		Combustible materials too near	1	204	
		Defective	1	16,000	
		Insufficiently protected	1	144	
		Sparks from	2	515	
		Gas, liquefied petroleum, improper use of or defective equipment	1	7,500	
		Gas, natural, explosion	1	10	
		Gasoline—			
		Carelessness with	1	175	
		Stoves, lamps, torches	3	4,992	
		Hot ashes, coals, etc.	1	134	
		Hot grease, oil, tar, etc., ignition of	21	13,925	
		Incendiary	7	1,531	
		Inflammable vapours, ignition of	1	34	
		Matches—			
		Carelessness with	4	308	
		Children with	4	2,652	
		Molten metal	2	377	
		Oil-burner explosion	1	64	
		Short circuit	12	4,609	
		Smokers' carelessness—			
		In bed	27	8,179	
		In the home	108	13,830	
		In unlisted locations	29	20,197	
		Sparks from bonfire	1	259	
		Spontaneous ignition	1	150	
		Stoves or stove-pipes—			
		Combustible materials too near	9	2,343	
		Insufficiently protected	2	223	
		Sparks from	2	154	
		Thawing pipes	1	829	
		Unknown	21	34,487	
					169,160
Asphalt plants and tanks	6	Boiler overheated	1	$987	
		Electrical appliances	1	1,134	
		Inflammable vapours, ignition of	1	250	
		Oxy-gas welding or cutting equipment, carelessness with	1	50	
		Spontaneous ignition	1	873	
		Unknown	1	8,550	
					11,844
Bakeries	8	Chimneys, defective or overheated	2	$1,516	
		Defective oven	2	248	
		Exposure	1	33	
		Fireworks	2	69	
		Smokers' carelessness	1	26	
					1,892
Banks	4	Oil-burners—			
		Defective equipment	1	$356	
		Explosion	1	1,045	
		Smokers' carelessness	1	56	
		Unknown	1	120	
					1,577
Barber-shops	4	Electrical appliances	1	$16	
		Inflammable vapours, ignition of	1	10	
		Smokers' carelessness	1	59	
		Unknown	1	34	
					119
Barges and scows	3	Smokers' carelessness	1	$17,697	
		Unknown	2	149,842	
					167,539

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Barns and stables	50	Electrical appliances	3	$2,588	
		Fireworks	1	550	
		Hot grease, ignition of	1	82	
		Incendiary	2	15,800	
		Matches, children with	5	1,911	
		Short circuit	1	78	
		Smokers' carelessness	1	249	
		Sparks from bonfire	2	397	
		Spontaneous ignition	5	7,070	
		Thawing pipes	1	8,093	
		Unknown	28	118,375	
					$155,193
Barracks	1	Unknown	1		5,500
Bath-houses	2	Matches, children with	1	$128	
		Stove, sparks from	1	889	
					1,017
Boarding-houses	3	Smokers' carelessness—			
		In bed	2	$82	
		In unlisted location	1	18	
					100
Boat-building works	7	Exposure	1	$1,075	
		Gasoline carelessness	1	20,300	
		Spontaneous ignition	1	21,355	
		Unknown	4	166,066	
					208,796
Boat-houses	3	Incendiary	1	$450	
		Smoking in bed	1	300	
		Unknown	1	430	
					1,180
Bottling-works	2	Exposure	1	$21,392	
		Sparks from bonfire	1	260	
					21,652
Buildings under construction	7	Inflammable vapours, ignition of	1	$327	
		Matches, children with	1	2,401	
		Smokers' carelessness	1	14,737	
		Stoves or stove-pipes insufficiently protected	3	1,400	
		Unknown	1	3,000	
					21,865
Bunk-houses	20	Chimney, defective	1	$8,270	
		Exposure	1	10,900	
		Gasoline carelessness	1	740	
		Matches, children with	1	200	
		Oil-burners—			
		Defective	1	714	
		Explosion	1	10,900	
		Smokers' carelessness	1	3,000	
		Stoves or stove-pipes—			
		Combustible materials too near	2	7,550	
		Insufficiently protected	3	3,032	
		Unknown	8	17,887	
					63,193
Canneries (fruit)	1	Sparks from bush fire	1		146
Chemical plants	2	Electrical appliances	1	$3,980	
		Sulphur, ignition of	1	2,114	
					6,094
Churches and church properties	17	Candles and open flames	1	$10	
		Chimneys, defective or overheated	2	28,425	
		Exposure	1	830	
		Furnaces or furnace-pipes insufficiently protected	2	3,709	
		Incendiary	1	50	
		Matches—			
		Carelessness with	1	38	
		Children with	1	106	
		Oil-burner explosion	3	477	
		Smokers' carelessness	2	38	
		Unknown	3	9,742	
					43,425
Club-houses (golf, yacht, etc.)	4	Inflammable vapours, ignition of	1	$422	
		Smokers' carelessness	2	38	
		Unknown	1	81	
					541

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Clubs	17	Matches, carelessness with	1	$20	
		Oil-burners, defective equipment	1	803	
		Short circuit	1	1,880	
		Smokers' carelessness	10	255	
		Unknown	4	4,414	
					$7,372
Coal and lumber yards	6	Fireworks	1	$451	
		Gasoline, carelessness with	1	1,500	
		Hot oil, ignition of	1	117	
		Incendiary	1	400	
		Sparks from bonfire	1	30	
		Sparks from mill burner	1	48,621	
					51,119
Cold-storage plants	2	Hot grease, ignition of	1	$164	
		Short circuit	1	200	
					364
Compressors	2	Kerosene, carelessness with	1	$39	
		Short circuit	1	182	
					221
Cook-houses	6	Chimney defective	1	$1,664	
		Gasoline, carelessness with	1	300	
		Oil-burners, defective equipment	1	21,120	
		Unknown	3	47,909	
					70,993
Cranes	2	Gasoline, broken line	1	$30	
		Short circuit	1	4,884	
					4,914
Dairies	4	Chimney, sparks from	1	$16	
		Thawing pipes	1	10	
		Unknown	2	5,451	
					5,477
Dehydrating plants	1	Electrical appliances	1		1,500
Dry-cleaning plants	11	Electrical appliances	2	$673	
		Match carelessness	1	580	
		Oil-burners—			
		Defective	1	535	
		Defective equipment	1	791	
		Explosion	1	592	
		Smokers' carelessness	1	50	
		Unknown	4	5,868	
					9,089
Dwellings	5,012	Candles and open flames	45	$27,395	
		Children playing with fire	13	3,388	
		Chimneys—			
		Defective or overheated	152	161,587	
		Sparks from	57	32,381	
		Defective wiring	27	91,022	
		Dust explosion	1	4,973	
		Electrical appliances	343	126,150	
		Electrical wiring overloaded	2	74	
		Engine back-firing	1	38	
		Exposure	54	70,816	
		Fireplaces—			
		Defective	20	7,349	
		Sparks from	251	36,204	
		Fireworks	30	11,666	
		Furnaces or furnace-pipes—			
		Combustible materials too near	19	22,261	
		Defective	12	45,013	
		Insufficiently protected	31	41,008	
		Sparks from	6	25,496	
		Upset	1	11,000	
		Gas, liquefied petroleum—			
		Explosion	6	6,286	
		Improper installation of appliance	2	16,190	
		Improper use of or defective equipment	7	36,855	
		Gas, natural—			
		Explosion	7	13,923	
		Improper installation of appliance	3	403	
		Improper use of or defective equipment	5	9,426	

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
		Gasoline—			
		Carelessness with	28	$35,918	
		Stoves, lamps, torches	11	28,474	
		Used in cleaning	2	1,806	
		Used to kindle fire	2	5,150	
		Vapour explosion	8	4,870	
		Heat radiation	3	909	
		Hot ashes, coals, etc.	26	9,326	
		Hot grease, oil, tar, etc., ignition of	278	78,676	
		Incendiary	21	48,889	
		Inflammable vapours, ignition of	15	13,233	
		Kerosene—			
		Carelessness with	1	8,350	
		Stoves, lamps, torches	7	9,472	
		Used to kindle fire	1	413	
		Lightning	9	2,384	
		Matches—			
		Carelessness with	48	24,463	
		Children with	143	88,047	
		Molten metal	3	263	
		Oil-burners—			
		Defective	56	51,282	
		Defective equipment	12	10,372	
		Explosion	42	40,535	
		Sparks from	3	2,241	
		Oxy-gas welding or cutting equipment—			
		Carelessness with	1	350	
		Sparks from	1	20	
		Short circuit	181	128,293	
		Smokers' carelessness—			
		In bed	169	35,245	
		In the home	1,962	239,882	
		In public premises	1	31	
		In unlisted locations	77	101,445	
		While intoxicated	2	2,144	
		Sparks from bonfire	41	30,890	
		Sparks from bush fire	2	155	
		Sparks from mill burner	1	15,680	
		Spontaneous ignition	8	23,209	
		Stoves or stove-pipes—			
		Combustible materials too near	131	51,897	
		Defective	18	38,876	
		Explosion	8	7,898	
		Insufficiently protected	96	170,362	
		Sparks from	31	27,375	
		Thawing pipes	15	11,792	
		Unknown	453	1,114,100	
					$3,265,621
Electrical manufacturing plants	2	Electrical appliances	1	$94	
		Unknown	1	132	
					226
Electrical substations	2	Short circuit	2		1,676
Electric-light plants	9	Engine back-firing	1	$1,908	
		Gasoline, broken line	1	133	
		Inflammable vapours, ignition of	1	77	
		Short circuit	1	60,000	
		Sparks from bonfire	1	70	
		Sparks from engine	1	175	
		Unknown	3	8,317	
					70,680
Electric-light and telephone poles	6	Electrical wiring overloaded	1	$100	
		Matches, children with	1	3,000	
		Short circuit	2	700	
		Sparks from bonfire	2	175	
					3,975
Elevators (grain)	1	Friction in conveyer-belt	1		2,065
Engines	7	Engine back-firing	1	150	
		Gasoline—			
		Broken line	1	618	
		Carelessness with	2	240	

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
		Sparks from bonfire	1	$26	
		Sparks from bush fire	1	162	
		Unknown	1	121	
					$1,317
Factories (bed spring)	1	Stove insufficiently protected	1		70
Factories (briquette)	1	Furnace insufficiently protected	1		200
Factories (candy)	1	Gas, natural, explosion	1		422
Factories (cotton processing)	1	Short circuit	1		22,420
Factories (furniture)	7	Exposure	1	$21,384	
		Fireworks	1	6,895	
		Smokers' carelessness	1	57,064	
		Spontaneous ignition	2	665	
		Unknown	2	169,461	
					255,469
Factories (paint)	1	Inflammable vapours, ignition of	1		738
Factories (paper box)	1	Unknown	1		1,940
Factories (paper products)	1	Electrical appliances	1		1,366
Factories (rock-wool insulation)	1	Chimney, sparks from	1		350
Factories (roofing material)	1	Hot tar, ignition of	1		20
Factories (rope)	1	Short circuit	1		102
Factories (sash and door)	4	Electrical appliances	1	$79	
		Fireworks	1	82	
		Matches, children with	1	25	
		Unknown	1	42,615	
					42,801
Factories (veneer and plywood)	4	Friction in machinery	1	$300	
		Short circuit	1	551	
		Unknown	2	968	
					1,819
Factories (wooden box)	2	Smokers' carelessness	1	$2,160	
		Unknown	1	35,647	
					37,807
Factories (wood products)	1	Hot grease, ignition of	1		5,499
Fences	7	Fireworks	1	$30	
		Matches, children with	2	23	
		Smokers' carelessness	1	50	
		Sparks from bonfire	1	25	
		Unknown	2	180	
					308
Fertilizer plants	3	Dust explosion	1	$296	
		Short circuit	1	50	
		Unknown	1	155,936	
					156,282
Fire and police stations	1	Smokers' carelessness	1		15
Fishing-boats	36	Defective battery connection	1	$1,900	
		Electrical appliances	1	20	
		Engine back-firing	2	11,815	
		Gasoline—			
		Broken line	1	2,660	
		Carelessness with	1	1,150	
		On exhaust-pipe	1	3,427	
		Vapour explosion	10	28,158	
		Matches, carelessness with	1	4,060	
		Oil-burners, defective	3	2,750	
		Short circuit	2	770	
		Smokers' carelessness	1	150	
		Sparks from engine	1	410	
		Stoves insufficiently protected	2	19,145	
		Unknown	9	50,196	
					126,611
Flour and rice mills	1	Unknown	1		449,180
Foundries	9	Chimneys—			
		Defective	1	$200	
		Sparks from	2	7,960	
		Furnaces, sparks from	3	743	
		Inflammable vapours, ignition of	1	540	
		Molten metal	1	187	
		Unknown	1	6,053	
					15,683

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Fruit-packing plants	2	Electrical appliances	1	$130	
		Incendiary	1	27,611	
					$27,741
Funeral chapels	1	Smokers' carelessness	1		15
Gaols	1	Unknown	1		136
Garages (private)	81	Children playing with fire	1	$75	
		Defective wiring	1	65	
		Electrical appliances	3	1,046	
		Exposure	11	9,952	
		Fireworks	1	2,050	
		Gasoline—			
		Carelessness with	1	76	
		Pump damaged by motor-vehicle	1	200	
		Incendiary	3	4,851	
		Inflammable vapours, ignition of	1	10	
		Matches—			
		Carelessness with	1	400	
		Children with	8	1,686	
		Oxy-gas welding or cutting equipment, sparks from	1	11,149	
		Short circuit	2	1,400	
		Smokers' carelessness	4	1,506	
		Sparks from bonfire	7	2,232	
		Sparks from grinder	1	725	
		Spontaneous ignition	1	1,802	
		Stoves insufficiently protected	3	23,290	
		Thawing pipes	1	3	
		Unknown	29	28,412	
					90,930
Garages (public)	37	Chimney, defective	1	$6,442	
		Electrical appliances	4	11,275	
		Exposure	3	42,299	
		Furnace insufficiently protected	1	100	
		Gasoline—			
		Carelessness with	2	23,951	
		Vapour explosion	2	35,836	
		Incendiary	1	81	
		Inflammable vapours, ignition of	3	526	
		Oil-burner, defective	1	38	
		Oxy-gas welding or cutting equipment—			
		Carelessness with	3	3,402	
		Defective	1	106	
		Sparks from	3	51,010	
		Short circuit	3	51,456	
		Smokers' carelessness—			
		In public premises	1	130	
		In unlisted location	1	7,992	
		Spontaneous ignition	1	2,957	
		Stoves or stove-pipes—			
		Defective	1	25	
		Explosion	1	9,689	
		Unknown	4	36,837	
					284,152
Gasoline service-stations	27	Chimney, defective	1	$87	
		Collision	1	430	
		Electrical appliances	2	494	
		Friction in pulley	1	10,229	
		Gas, natural, explosion	1	800	
		Gasoline—			
		Broken line	1	13,558	
		Carelessness with	4	4,090	
		Pump damaged by motor-vehicle	2	870	
		Used in cleaning	1	696	
		Vapour explosion	1	285	
		Inflammable vapours, ignition of	1	1,100	
		Oxy-gas welding or cutting equipment, sparks from	1	214	
		Short circuit	5	23,043	
		Smokers' carelessness	1	3,570	
		Stove insufficiently protected	1	176	
		Unknown	3	7,264	
					66,906

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Grandstands	1	Smokers' carelessness	1		$275
Gravel pits and plants	2	Short circuit	2		765
Greenhouses	9	Electrical appliances	1	$709	
		Furnace insufficiently protected	1	64	
		Incendiary	1	400	
		Oil-burners—			
		Defective	1	48	
		Explosion	1	75	
		Stoves or stove-pipes—			
		Defective	1	225	
		Explosion	1	4,000	
		Insufficiently protected	1	52	
		Unknown	1	644	
					6,217
Halls	15	Electrical appliances	2	$1,890	
		Fireplaces, sparks from	1	34	
		Furnace insufficiently protected	1	13,740	
		Incendiary	1	800	
		Oil-burners, defective	2	196	
		Short circuit	2	11,384	
		Smokers' carelessness	2	9,545	
		Sparks from bonfire	1	306	
		Unknown	3	12,456	
					50,351
Hay-stacks and balers	3	Engine back-firing	1	$291	
		Matches, children with	1	80	
		Sparks from mill burner	1	500	
					871
Hospitals, nursing homes, and institutions	17	Electrical appliances	2	$91	
		Smokers' carelessness—			
		In bed	4	302	
		In unlisted locations	6	446	
		Sparks from bonfire	1	25	
		Stoves, combustible materials too near	2	68	
		Unknown	2	143	
					1,075
Hotels	125	Chimney, sparks from	1	$141	
		Defective wiring	1	4,919	
		Electrical appliances	3	1,086	
		Exposure	4	60,861	
		Fireplace, sparks from	1	4	
		Furnace insufficiently protected	1	1,238	
		Gasoline vapour explosion	1	80	
		Hot grease, oil, tar, etc., ignition of	4	4,273	
		Incendiary	2	113	
		Matches—			
		Carelessness with	1	12	
		Children with	2	1,350	
		Oxy-gas welding or cutting equipment, sparks from	1	25	
		Short circuit	4	2,999	
		Smokers' carelessness—			
		In bed	40	2,895	
		In public premises	4	218	
		In unlisted locations	35	4,110	
		Stove insufficiently protected	1	203	
		Unknown	19	118,889	
					203,416
Kennels	1	Unknown	1		3,800
Launches	25	Electro-welding equipment, sparks from	1	$4,000	
		Engine back-firing	2	750	
		Friction in machinery	1	7,988	
		Gasoline—			
		Broken line	2	3,517	
		Carelessness with	4	9,005	
		Stove	1	300	
		Vapour explosion	6	22,696	
		Hot grease, ignition of	1	93	
		Incendiary	1	500	
		Short circuit	1	14	
		Unknown	5	1,866	
					50,729

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Laundries	2	Oxy-gas welding or cutting equipment, sparks from	1	$917	
		Unknown	1	4	
					$921
Logging camps	13	Engine back-firing	1	$4,653	
		Gas, liquefied petroleum, improper use of or defective equipment	1	3,122	
		Inflammable vapours, ignition of	1	19,415	
		Oil-burner, defective	1	6,574	
		Oxy-gas welding or cutting equipment, sparks from	1	380	
		Short circuit	1	4,250	
		Sparks from mill burner	1	651	
		Stove insufficiently protected	1	1,500	
		Unknown	5	123,781	
					164,326
Machine-shops	12	Exposure	4	$14,055	
		Furnace insufficiently protected	1	244	
		Hot grease, ignition of	1	2,761	
		Oil-burner, defective	1	1,134	
		Short circuit	2	1,141	
		Stove, sparks from	1	120	
		Unknown	2	27,551	
					47,006
Meat-packing plants	2	Electrical appliances	1	$3,720	
		Unknown	1	59,500	
					63,220
Medical clinics	4	Electrical appliances	1	$230	
		Oil-burner, defective	1	60	
		Smokers' carelessness	2	91	
					381
Motor courts	61	Electrical appliances	4	$244	
		Gas, liquefied petroleum, improper use of or defective equipment	4	585	
		Gas, natural, improper use of or defective equipment	1	900	
		Gasoline, carelessness with	1	1,928	
		Hot grease, oil, tar, etc., ignition of	3	142	
		Oil-burners, defective	2	12,505	
		Short circuit	2	1,671	
		Smokers' carelessness—			
		In bed	10	1,370	
		In the home	6	280	
		In unlisted locations	18	4,257	
		Stoves or stove-pipes—			
		Combustible material too near	1	60	
		Insufficiently protected	1	20	
		Sparks from	1	564	
		Unknown	7	13,013	
					37,539
Motor-vehicles (*1,229)—					
Automobiles, passenger	899	Collision	7	$3,025	
		Defective battery connection	5	149	
		Defective muffler	2	145	
		Defective wiring	36	4,123	
		Electrical appliances	20	4,694	
		Electrical wiring overloaded	1	96	
		Electro-welding equipment, sparks from	1	801	
		Engine back-firing	58	21,921	
		Exposure	15	6,200	
		Fireworks	4	280	
		Friction—			
		In brake-drum	6	1,037	
		In tires	4	4,049	
		Gas, liquefied petroleum, explosion	1	1,900	
		Gasoline—			
		Broken line	15	4,380	
		Carelessness with	6	5,074	
		On exhaust-pipe	11	3,765	
		Vapour explosion	10	3,974	
		Heat radiation	5	166	
		Hot grease, oil, tar, etc., ignition of	4	656	

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss
		Incendiary	14	$6,220
		Matches—		
		Carelessness with	4	444
		Children with	1	80
		Motor-vehicle upset	7	15,401
		Oxy-gas welding or cutting equipment—		
		Carelessness with	4	1,194
		Sparks from	1	35
		Short circuit	212	48,802
		Smokers' carelessness	303	35,057
		Sparks from bonfire	4	1,786
		Sparks from bush fire	1	30
		Unknown	137	57,935
				$233,419
Motor-vehicles—*Continued*				
Buses	6	Engine back-firing	1	$250
		Friction in brake-drum	1	320
		Gasoline on exhaust-pipe	1	40
		Hot oil, ignition of	1	250
		Matches, children with	1	40
		Short circuit	1	82
				$982
Motor-cycles	15	Engine back-firing	7	$950
		Gasoline—		
		Broken line	2	100
		Carelessness with	1	76
		Motor-vehicle upset	1	200
		Short circuit	2	147
		Smokers' carelessness	1	100
		Unknown	1	200
				$1,773
Tractors (bulldozers, graders, etc.)	92	Candles and open flames	1	$100
		Defective wiring	1	2,000
		Electrical appliances	1	822
		Engine back-firing	8	11,388
		Exposure	1	162
		Friction in tires	3	1,180
		Gasoline—		
		Broken line	4	2,481
		Carelessness with	13	6,218
		On exhaust-pipe	3	2,762
		Vapour explosion	8	8,595
		Motor-vehicle upset	2	6,820
		Oxy-gas welding or cutting equipment—		
		Carelessness with	2	1,784
		Sparks from	7	13,281
		Short circuit	20	43,728
		Sparks from bonfire	3	3,339
		Sparks from mill burner	1	7,500
		Unknown	14	32,949
				$145,109
Trailers and semi-trailers	17	Friction in tires	2	$1,750
		Gas, liquefied petroleum, improper use of or defective equipment	1	5,054
		Gasoline on exhaust-pipe	1	2,138
		Hot grease, oil, tar, etc., ignition of	3	12,735
		Matches, children with	1	236
		Oxy-gas welding or cutting equipment, sparks from	1	8,000
		Short circuit	3	9,946
		Smokers' carelessness	1	3,250
		Unknown	4	18,307
				$61,416

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Motor-vehicles—*Continued*					
Trucks	200	Collision	2	$5,827	
		Defective muffler	2	559	
		Defective wiring	7	452	
		Electrical appliances	2	520	
		Electrical wiring overloaded	1	62	
		Engine back-firing	13	15,340	
		Exposure	9	21,289	
		Fireworks	1	100	
		Friction—			
		In brake-drum	1	3,000	
		In tires	4	7,400	
		Gas, liquefied petroleum, explosion	1	1,200	
		Gasoline—			
		Broken line	10	14,400	
		Carelessness with	7	11,293	
		On exhaust-pipe	7	4,192	
		Vapour explosion	7	7,239	
		Hot ashes	6	431	
		Hot grease, ignition of	1	150	
		Incendiary	1	500	
		Inflammable vapours, ignition of	1	30	
		Matches, children with	1	85	
		Molten metal	1	50	
		Motor-vehicle upset	9	22,189	
		Oxy-gas welding or cutting equipment—			
		Carelessness with	2	131	
		Sparks from	4	7,656	
		Short circuit	43	15,170	
		Smokers' carelessness	15	3,737	
		Sparks from bonfire	3	227	
		Stove, combustible material too near	1	197	
		Unknown	38	58,767	
				$202,193	
					*$644,892
Mushroom-houses	2	Oil-burner, defective	1	$3,450	
		Unknown	1	300	
					3,750
Offices	48	Defective wiring	1	$65	
		Electrical appliances	1	68	
		Exposure	9	9,736	
		Gas, liquefied petroleum, explosion	1	2,771	
		Gasoline stove	1	50	
		Hot oil, ignition of	1	228	
		Incendiary	1	25	
		Inflammable vapours, ignition of	1	110	
		Oil-burners, explosion	3	1,669	
		Short circuit	6	54,504	
		Smokers' carelessness	9	5,550	
		Stoves or stove-pipes—			
		Combustible material too near	2	483	
		Insufficiently protected	2	447	
		Unknown	10	81,200	
					156,906
Oil-wells	1	Unknown	1		184,741
Paper and pulp mills	8	Electrical appliances	1	$3,500	
		Friction in machinery	1	6,953	
		Oxy-gas welding or cutting equipment, sparks from	2	6,503	
		Short circuit	1	1,311	
		Steam-pipe insufficiently protected	1	150	
		Unknown	2	1,418	
					19,835
Peat plants	1	Dust explosion	1		18,268
Piggeries	2	Unknown	2		18,969
Post offices	2	Electrical appliances	1	$4,983	
		Unknown	1	11,000	
					15,983
Poultry-houses	25	Defective brooder	7	$4,340	
		Defective wiring	1	52	
		Engine back-firing	1	12,483	
		Matches, children with	2	1,260	

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
		Sparks from bonfire	1	$1,500	
		Spontaneous ignition	1	6,800	
		Stoves or stove-pipes—			
		Combustible material too near	2	87	
		Insufficiently protected	1	700	
		Sparks from	2	2,119	
		Unknown	7	16,326	
					$45,667
Power-houses	7	Electrical appliances	1	$50	
		Engine back-firing	1	1,417	
		Gasoline, carelessness with	1	1,100	
		Short circuit	1	12,000	
		Sparks from mill burner	1	558	
		Unknown	2	70,377	
					85,502
Power-saws	2	Engine back-firing	1	$111	
		Short circuit	1	240	
					351
Power-shovels	2	Gasoline, carelessness with	1	$1,500	
		Oil-burner, defective	1	6,000	
					7,500
Pumps and pump-houses	7	Gas, liquefied petroleum, explosion	1	$491	
		Gasoline vapour explosion	1	100	
		Oxy-gas welding or cutting equipment, sparks from	1	270	
		Short circuit	1	1,012	
		Sparks from engine	1	100	
		Thawing pipes	1	15	
		Unknown	1	220	
					2,208
Radio stations	1	Matches, children with	1		25
Railroad rolling-stock	5	Collision	1	$1,500	
		Exposure	1	13,000	
		Friction in machinery	1	100	
		Stove insufficiently protected	1	25	
		Unknown	1	2,000	
					16,625
Railroad stations	3	Chimney, defective	1	$1,475	
		Unknown	2	7,315	
					8,790
Refineries (gasoline or oil)	4	Exposure	1	$12,002	
		Oil-burners—			
		Defective	1	3,475	
		Defective equipment	1	3,000	
		Spontaneous ignition	1	850	
					19,327
Refineries (salt)	1	Exposure	1		66
Restaurants	34	Chimney, sparks from	1	$345	
		Electrical appliances	5	1,889	
		Exposure	2	42,191	
		Gas, natural, improper use of or defective equipment	1	140	
		Hot grease, oil, tar, etc., ignition of	11	39,917	
		Incendiary	2	8,669	
		Short circuit	1	184	
		Smokers' carelessness	3	184	
		Stoves or stove-pipes—			
		Combustible material too near	1	268	
		Insufficiently protected	2	3,694	
		Unknown	5	17,696	
					115,177
Rinks (curling)	1	Sparks from bonfire	1		25
Rinks (ice-skating)	2	Electrical appliances	1	$39	
		Thawing pipes	1	203,872	
					203,911
Rooming-houses	62	Chimneys—			
		Defective	3	$181	
		Sparks from	1	85	
		Electrical appliances	4	722	
		Exposure	2	2,362	
		Fireplace, sparks from	1	18	
		Fireworks	1	531	

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
		Hot grease, oil, tar, etc., ignition of	3	$867	
		Matches, children with	1	1,560	
		Oil-burner explosion	1	255	
		Short circuit	3	144	
		Smokers' carelessness—			
		In bed	8	546	
		In the home	12	708	
		In unlisted locations	11	11,377	
		Sparks from bonfire	1	85	
		Stove insufficiently protected	1	15,853	
		Unknown	9	15,661	
					$50,955
Sawmills	90	Boiler, defective	1	$478	
		Electrical appliances	2	2,495	
		Friction—			
		In conveyer-belt	1	50,000	
		In machinery	3	10,105	
		Gas, liquefied petroleum, explosion	1	306	
		Incendiary	2	23,131	
		Lightning	1	9,683	
		Molten metal	1	50	
		Oxy-gas welding or cutting equipment—			
		Carelessness with	1	7,200	
		Sparks from	10	274,908	
		Short circuit	5	67,964	
		Sparks from engine	1	782	
		Sparks from mill burner	18	307,717	
		Unknown	43	1,408,782	
					2,163,601
Schools	26	Furnace, defective	1	$23,567	
		Gasoline-torch carelessness	1	29,250	
		Incendiary	9	307,421	
		Matches—			
		Carelessness with	1	12	
		Children with	1	731	
		Molten metal	1	25	
		Oil-burner, defective	1	1,815	
		Smokers' carelessness	2	204	
		Sparks from bonfire	1	40	
		Unknown	8	792,840	
					1,155,905
Sheds	144	Chimneys—			
		Defective	1	$229	
		Sparks from	3	943	
		Defective brooder	1	420	
		Defective wiring	1	60	
		Electrical appliances	2	119	
		Exposure	6	3,086	
		Fireworks	4	1,076	
		Furnace, defective	1	3,675	
		Gasoline, carelessness with	1	600	
		Heat radiation	2	275	
		Hot ashes, coals, etc.	5	1,231	
		Incendiary	12	40,024	
		Inflammable vapours, ignition of	1	2,389	
		Matches, children with	25	11,809	
		Oil-burner, defective	1	1,050	
		Smokers' carelessness	10	1,928	
		Sparks from bonfire	9	7,960	
		Sparks from engine	1	1,374	
		Sparks from mill burner	1	20	
		Stoves or stove-pipes—			
		Combustible material too near	1	7,952	
		Insufficiently protected	2	1,877	
		Unknown	54	47,768	
					135,865
Sheet-metal works	1	Sparks from grinder	1		1,315
Shingle-mills	13	Boiler, defective	1	$25	
		Gasoline vapour explosion	1	150	
		Incendiary	1	5,000	
		Sparks from mill burner	2	275,994	
		Spontaneous ignition	1	50	
		Unknown	7	66,666	
					347,885

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Ships	1	Oxy-gas welding or cutting equipment, sparks from	1		$25
Shipyards	2	Oxy-gas welding or cutting equipment, sparks from	1	$1,128	
		Smokers' carelessness	1	1,128	
					2,256
Smelting plants	31	Dust explosion	3	$570	
		Electrical appliances	2	35	
		Friction in machinery	2	250	
		Furnaces, sparks from	2	325	
		Hot ashes	1	50	
		Molten metal	4	21,515	
		Oxy-gas welding or cutting equipment—			
		Carelessness with	1	25	
		Sparks from	4	300	
		Short circuit	10	48,157	
		Unknown	2	10,281	
					81,508
Smoke-houses	2	Boiler, defective	1	$32	
		Hot grease, ignition of	1	100	
					132
Steam baths	1	Chimney, defective	1		830
Steel-fabricating plants	2	Electrical appliances	1	$103	
		Exposure	1	230	
					333
Stores	189	Chimneys—			
		Defective	1	$216	
		Sparks from	2	773	
		Defective wiring	1	19,001	
		Electrical appliances	13	64,930	
		Exposure	17	49,549	
		Fireworks	8	571	
		Furnaces or furnace-pipes—			
		Combustible material too near	1	131	
		Insufficiently protected	2	1,678	
		Gas, liquefied petroleum, improper use of or defective equipment	1	200	
		Gas, natural, improper installation of appliance	1	125	
		Gasoline—			
		Carelessness with	1	9,429	
		Stoves, lamps, torches	1	200	
		Hot grease, oil, tar, etc., ignition of	4	1,113	
		Incendiary	3	54,042	
		Inflammable vapours, ignition of	1	100	
		Matches—			
		Carelessness with	1	3	
		Children with	4	348	
		Oil-burners—			
		Defective	1	40	
		Explosion	4	2,680	
		Sparks from	1	24	
		Oxy-gas welding or cutting equipment, sparks from	1	14,272	
		Short circuit	15	164,783	
		Smokers' carelessness—			
		In public premises	4	2,953	
		In unlisted locations	64	26,732	
		Sparks from bonfire	2	178	
		Spontaneous ignition	1	100	
		Stoves or stove-pipes—			
		Insufficiently protected	1	350	
		Sparks from	2	883	
		Unknown	31	658,608	
					1,074,012
Stores and apartments	45	Chimney, defective	1	$319	
		Defective wiring	1	1,000	
		Electrical appliances	1	3,616	
		Exposure	7	34,580	
		Gas, natural, explosion	1	93	
		Hot grease, ignition of	1	1,362	
		Matches, children with	1	113	
		Short circuit	2	20,071	

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
		Smokers' carelessness—			
		In bed	3	$330	
		In the home	3	2,374	
		In unlisted locations	13	7,559	
		Stoves or stove-pipes—			
		Combustible material too near	1	342	
		Insufficiently protected	2	180	
		Unknown	8	56,558	
					$128,497
Stores and dwellings	21	Defective wiring	1	$74	
		Electrical appliances	1	300	
		Fireworks	1	98	
		Incendiary	1	18,800	
		Oil-burners—			
		Defective	1	368	
		Defective equipment	2	6,479	
		Explosion	1	1,000	
		Short circuit	2	30,535	
		Smokers' carelessness—			
		In the home	2	6,391	
		In unlisted locations	2	55	
		Sparks from bonfire	1	3,800	
		Stoves or stove-pipes—			
		Combustible material too near	1	105	
		Insufficiently protected	1	1,155	
		Unknown	4	66,445	
					135,605
Stores and offices	17	Electrical appliances	2	$14,379	
		Exposure	2	11,142	
		Incendiary	1	12,078	
		Oil-burners—			
		Defective	3	1,431	
		Defective equipment	1	320	
		Short circuit	1	35	
		Smokers' carelessness	2	16,112	
		Spontaneous ignition	1	243	
		Unknown	4	101,327	
					157,067
Stores and rooms	25	Chimney, defective	1	$83	
		Exposure	1	7,298	
		Fireplace, defective	1	245	
		Fireworks	1	15	
		Furnace, insufficiently protected	1	200	
		Incendiary	1	150	
		Matches, children with	1	75	
		Short circuit	2	63	
		Smokers' carelessness—			
		In bed	3	165	
		In the home	3	140	
		In unlisted locations	4	2,324	
		Sparks from grinder	1	4,150	
		Stove insufficiently protected	1	20	
		Unknown	4	64,011	
					78,939
Tanneries	1	Incendiary	1		59,878
Telephone exchanges	2	Incendiary	1	$3,762	
		Smokers' carelessness	1	100	
					3,862
Tents	8	Gasoline—			
		Lamp	1	$490	
		Vapour explosion	1	1,071	
		Incendiary	1	237	
		Matches, children with	1	89	
		Sparks from bonfire	1	50	
		Sparks from bush fire	1	74	
		Unknown	2	1,053	
					3,064
Theatres	2	Electrical appliances	1	$1,194	
		Exposure	1	1,200	
					2,394

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES—*Continued*

Property		Causes		Amount of Loss	
Trailers (house)	47	Electrical appliances	2	$2,508	
		Exposure	2	4,668	
		Fireworks	2	625	
		Friction in tires	1	2,100	
		Gas, liquefied petroleum—			
		Explosion	1	133	
		Improper use of or defective equipment	2	3,300	
		Kerosene stove	1	206	
		Matches, carelessness with	1	70	
		Oil-burners—			
		Defective	3	11,330	
		Explosion	2	5,248	
		Short circuit	4	6,464	
		Smokers' carelessness—			
		In bed	1	75	
		In the home	3	208	
		While intoxicated	2	3,122	
		Stoves or stove-pipes—			
		Combustible material too near	1	2,284	
		Defective	1	73	
		Insufficiently protected	3	2,435	
		Thawing pipes	1	64	
		Unknown	14	21,661	
					$66,574
Trestles	1	Gasoline, carelessness with	1		15
Tug-boats	14	Engine back-firing	1	$4,000	
		Gasoline—			
		Carelessness with	1	1,500	
		Vapour explosion	2	13,735	
		Heat radiation	1	23	
		Molten metal	1	25	
		Oil-burner, defective	1	350	
		Oxy-gas welding or cutting equipment, sparks from	1	45,000	
		Stoves insufficiently protected	3	62,976	
		Unknown	3	51,117	
					178,726
Warehouses	41	Exposure	5	$138,542	
		Furnace, combustible material too near	1	257	
		Incendiary	2	434	
		Inflammable vapours, ignition of	1	242	
		Oil-burner explosion	1	300	
		Oxy-gas welding or cutting equipment—			
		Carelessness with	1	300	
		Sparks from	2	5,677	
		Short circuit	2	1,149	
		Smokers' carelessness	4	120,086	
		Sparks from bonfire	1	350,051	
		Stoves or stove-pipes—			
		Combustible material too near	1	42	
		Insufficiently protected	1	586	
		Unknown	19	175,769	
					793,435
Wharves	2	Exposure	1	$15,000	
		Incendiary	1	11,500	
					26,500
Woodworking plants	4	Chimneys, sparks from	1	$15,177	
		Stoves or stove-pipes—			
		Insufficiently protected	1	2,250	
		Sparks from	1	2,160	
		Unknown	1	5,062	
					24,649
Workshops	8	Gasoline, carelessness with	1	$2,578	
		Hot ashes	1	200	
		Kerosene, carelessness with	1	75	
		Smokers' carelessness	1	400	
		Stoves insufficiently protected	2	14,638	
		Unknown	2	1,500	
					19,391
Totals	8,268				$14,859,552

TABLE VI.—SUMMARY

	Fires Reported						Amount of Loss					
	City Municipalities (32)	District Municipalities (30)	Town Municipalities (3)	Village Municipalities (58)	Fire Districts (19)	Total	City Municipalities	District Municipalities	Town Municipalities	Village Municipalities	Fire Districts	Total
1959												
January	395	269	8	30	104	806	$646,054	$216,581	$32,982	$90,138	$636,241	$1,621,996
February	327	211	3	33	108	682	437,400	483,247	4,424	34,163	422,532	1,381,766
March	323	177	3	27	104	634	130,340	131,629	23,070	47,332	261,247	593,618
April	365	173	3	34	113	688	404,865	134,342	1,470	73,188	527,722	1,141,587
May	340	202	4	28	85	659	573,833	206,712	58,111	53,135	350,439	1,242,230
June	283	183	2	21	95	584	186,951	414,282	135	26,069	450,557	1,077,994
July	312	181	1	36	124	654	757,029	611,866	400	271,332	486,428	2,127,055
August	348	196	4	28	117	693	413,959	128,968	446	191,166	346,683	1,081,222
September	307	187	5	18	83	600	567,438	246,018	584	119,830	584,556	1,518,426
October	318	194	3	25	97	637	186,017	103,268	99	19,796	167,709	476,889
November	353	249	7	32	144	785	207,958	139,544	60,024	62,708	625,327	1,095,561
December	426	265	2	38	115	846	849,508	209,686	5,643	56,983	379,388	1,501,208
Totals	4,097	2,487	45	350	1,289	8,268	$5,361,352	$3,026,143	$187,388	$1,045,840	$5,238,829	$14,859,552

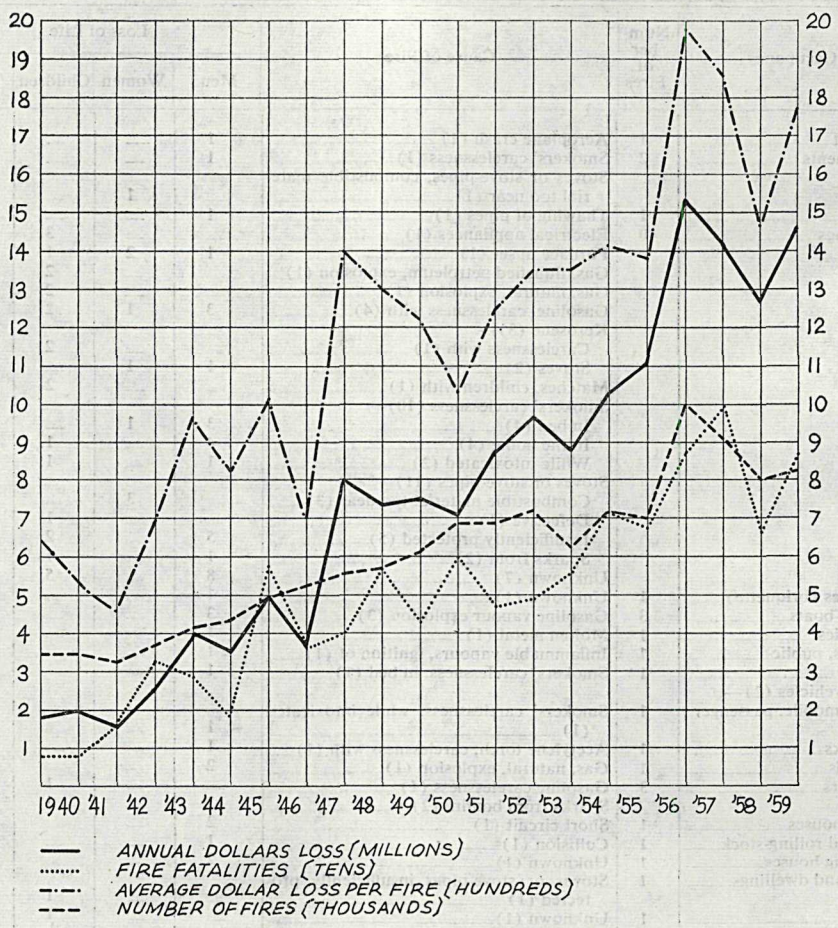
TABLE VII.—TEN-YEAR COMPARATIVE STATEMENT OF FIRE LOSSES

	City Municipalities		District Municipalities		Town Municipalities		Village Municipalities		Fire Districts		Total	
	Fires	Losses	Fires	Losses	Fires	Losses	Fires	Losses	Fires	Losses	Fires	Losses
1959	4,097	$5,361,352	2,487	$3,026,143	45	$187,388	350	$1,045,840	1,289	$5,238,829	8,268	$14,859,552
1958	4,101	4,532,740	2,381	2,279,087	35	49,173	312	718,375	1,234	5,123,019	8,063	12,702,394
1957	4,050	4,789,896	2,197	3,223,907	.....	.....	317	491,843	1,233	6,028,982	7,797	14,534,628
1956	4,251	4,812,453	1,999	3,437,286	.....	.....	325	813,436	1,263	6,245,570	7,838	15,308,745
1955	4,273	3,546,272	1,866	2,168,413	.....	.....	313	521,498	1,191	4,653,437	7,643	10,889,620
1954	4,075	3,202,716	1,728	2,571,833	.....	.....	307	503,161	984	3,899,992	7,094	10,177,702
1953	3,770	2,905,393	1,456	1,641,308	.....	.....	239	240,596	964	3,293,193	6,429	8,080,490
1952	4,306	4,516,437	1,493	1,085,927	.....	.....	263	499,587	1,000	3,501,280	7,062	9,603,231
1951	4,167	2,755,943	1,540	1,186,884	.....	.....	256	979,081	926	3,682,518	6,889	8,604,426
1950	4,137	2,415,961	1,444	1,494,216	.....	.....	229	330,176	965	2,812,353	6,775	7,052,706
Totals	41,227	$38,839,163	18,591	$22,115,004	80	$236,561	2,911	$6,143,593	11,049	$44,479,173	73,858	$111,813,494

TABLE VIII.—LOSS OF LIFE, 1950–59

Occupancy	Number of Fires	Cause of Fire	Loss of Life			
			Men	Women	Children	Total
Aircraft	1	Aeroplane crash (1)	1	—	—	1
Apartments	2	Smokers' carelessness (1)	1	—	—	1
		Stoves or stove-pipes, combustible material too near (1)	—	1	—	1
Arenas	1	Thawing of pipes (1)	1	—	—	1
Dwellings	40	Electrical appliances (1)	—	—	3	3
		Furnace upset (1)	1	2	1	4
		Gas, liquefied petroleum, explosion (1)	—	—	2	2
		Gas, natural, explosion (1)	—	—	2	2
		Gasoline, carelessness with (4)	3	1	2	6
		Kerosene (3)—				
		Carelessness with (1)	—	—	2	2
		Stoves (2)	1	1	—	2
		Matches, children with (1)	—	—	2	2
		Smokers' carelessness (10)—				
		In bed (4)	3	1	—	4
		In the home (4)	4	—	1	5
		While intoxicated (2)	1	—	1	2
		Stoves or stove-pipes (11)—				
		Combustible material too near (3)	—	3	—	3
		Defective (1)	—	—	1	1
		Insufficiently protected (5)	5	—	2	7
		Sparks from (2)	1	—	1	2
		Unknown (7)	8	—	5	13
Factories (briquette)	1	Unknown (1)	1	—	—	1
Fishing-boats	3	Gasoline vapour explosion (3)	3	—	—	3
Foundries	1	Molten metal (1)	1	—	—	1
Garages, public	1	Inflammable vapours, ignition of (1)	1	—	—	1
Hotels	1	Smokers' carelessness, in bed (1)	1	—	—	1
Motor-vehicles (2)—						
Automobile, passenger	1	Smokers' carelessness, while intoxicated (1)	1	—	—	1
Trucks	1	Acetylene torch, carelessness with (1)	1	—	—	1
Oil-wells	1	Gas, natural, explosion (1)	2	—	—	2
Outdoors	3	Gasoline carelessness (1)	—	—	1	1
		Sparks from bonfire (2)	1	—	1	2
Power-houses	1	Short circuit (1)	2	—	—	2
Railroad rolling-stock	1	Collision (1)	1	—	—	1
Rooming-houses	1	Unknown (1)	2	—	—	2
Stores and dwellings	1	Stoves or stove-pipes insufficiently protected (1)	—	—	1	1
Tents	1	Unknown (1)	—	—	1	1
Trailers (house)	1	Smokers' carelessness, while intoxicated (1)	—	—	1	1
Totals, 1959	63		47	9	30	86
Totals, 1958			28	14	25	67
Totals, 1957			45	12	41	98
Totals, 1956			38	16	31	85
Totals, 1955			26	11	28	65
Totals, 1954			29	13	30	72
Totals, 1953			24	13	19	56
Totals, 1952			27	6	17	50
Totals, 1951			19	12	18	49
Totals, 1950			28	13	19	60
Ten-year totals			311	119	258	688

TABLE IX.—TWENTY-YEAR FIRE LOSS



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