ANNUAL REPORT

OF THE

FIRE MARSHAL

FOR

1968

BRITISH COLUMBIA

HON. L. R. PETERSON, Q.C.,
Attorney-General of British Columbia

B. NIXON,
Fire Marshal of British Columbia

DEPARTMENT OF THE ATTORNEY-GENERAL

To Colonel the Honourable JOHN R. NICHOLSON, P.C., O.B.E., Q.C., LL.D.,
Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present the Forty-seventh Annual Report of the Fire Marshal for the year ended December 31, 1968.

LESLIE R. PETERSON,
Attorney-General.

VICTORIA, BRITISH COLUMBIA, August 1, 1969.

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REPORT OF THE FIRE MARSHAL

OFFICE OF THE FIRE MARSHAL,
VANCOUVER, BRITISH COLUMBIA, August 1, 1969.

The Honourable Leslie R. Peterson, Q.C.,
Attorney-General, Victoria, British Columbia.

SIR,—I beg to submit the Forty-seventh Annual Report of the Fire Marshal for the year ended December 31, 1968. During the year there were 7,010 fires, with a loss of $21,116,971. Although there was a slight increase in the number of fires there was a decrease in the loss, as there was in 1967 from the year 1966, when our losses reached the all-time high of over 23 million dollars. Sixty-six of our fires were over $50,000 each and accounted for $9,257,825. Nineteen of these large fires occurred in our unorganized areas and were responsible for nearly three million dollars of our loss.

I regret to report a number of deaths due to fire. There were 100 during the year 1968, a decrease of six from the preceding year. Eighty-one separate fires accounted for this loss of life and a glance at Table VIII will show that 47 of these fires occurred in dwellings with a life loss of 56. Nearly 50 per cent of all fatal fires were caused by smokers' carelessness and 19 fires from smoking in bed.

Fire Advisory Services

Progress made in the formation of regional districts throughout the Province has increased the scope of fire-protection surveys and this additional service has required the reallocation of inspectional services. During the year, six requests for such surveys were made.

In the year 1968 we inaugurated a programme of certification of fire apparatus. This is proving of great benefit to municipalities and manufacturers. The first such certificate was issued on November 3rd to a local manufacturer of fire apparatus.

Pursuant to the *Fire Marshal Act,* our staff Inspectors made 1,058 inspections and Local Assistants to the Fire Marshal, 92,074. Arising out of these inspections, 172 orders were issued and a number of appeals heard and determined. I am pleased to report that following inspections, in most of the cases, fire hazards were corrected without orders being issued.

Among matters receiving special consideration were the increased number of flammable fabrics, toys, and novelties. Full co-operation, where requested in the matter of control, has been received from foreign Trade Commissioners and local distributors. This has resulted in the removal of hazardous materials and items from the retail market.

The British Columbia Emergency Fire Defence Plan

This plan continues to occupy an active role. One Provincial Fire Advisory Council meeting and two Zone meetings were held and seven organization meetings and 29 lectures were given on the Fire Defence Plan.

Fire Investigation Services

This year, 377 fires were investigated by staff Inspectors, which resulted in 32 Court appearances and 20 attendances at inquests. The results of these investigations are set out in Table I. The collection and reporting of selected fire-crime information to the Dominion Bureau of Statistics is the responsibility of this office, and the returns for the year are included in Table I.

Fire Service Training

Three hundred and seventeen instructional classes, attended by 1,161 fire-fighters, were held during the year, providing 951 hours of instruction. It was encouraging to note that 689 certificates of attendance were issued to fire-fighters attending these classes from 63 different departments.

The first Provincial Course of Instruction in Fire Protection was held in June of the year. This was a three-week basic training course for fire-fighters and consisted of 32 lectures and 37 periods of practical instruction. At the end of the course written examinations were held and certificates issued.

During the year, fire-pumpers were assigned for training to Barkerville, Fort Steele, Creston, Revelstoke, Saanich, Riverview, Valleyview, Vancouver Wireless Station, and the British Columbia Penitentiary.

Orientation courses for Local Assistants to the Fire Marshal continue to be held. Some 20 fire departments are represented at each course, which covers instruction in the use of the *Fire Marshal Act* and regulations. Further, staff Inspectors participated in in-service training at the Royal Canadian Mounted Police Depot, Regina, and the Los Angeles Fire Department.

Public Information Services

Our Film Library continues to be a popular source of information not only to the Fire Service but to the general public. Our films were placed on loan 565 times, providing a valuable educational service to the community.

The distribution of fire-safety literature and technical information continues to occupy a prominent role in our public service, not the least of which is the conducting of public displays in the interest of fire prevention. Active membership in international, national, Provincial, and local advisory and enforcement agencies enables us to keep abreast of current fire-safety requirements.

Public Safety

We receive and circulate to fire and police departments throughout the Province information on the movement and location of radioactive materials. Large shipments of these sources are convoyed through the heavily populated areas by our Inspectors.

Moving-picture projectionist examinations, held pursuant to the *Fire Marshal Act* and regulations, were attended by 26 applicants. As a result of these examinations, seven first-class and ten second-class licences were issued.

The continued increase in the use of mobile homes and travel trailers equipped with compressed-gas appliances has resulted in more than 5,000 Fire Marshal-approval labels being issued.

During the year, 1,390 plans and specifications pertaining to all regulations, requiring approval under the *Fire Marshal Act,* were received and processed.

Statistical information goes out each year to the Dominion Fire Commissioner, Fire Marshals, and Fire Commissioners across Canada and the United States, insurance companies, adjusters, and libraries, to Local Assistants to the Fire Marshal, and many others. For tabulating purposes, detailed records of all large-loss fires are sent to the National Fire Protection Association for inclusion in fire-loss surveys.

In October of the year we moved to our new quarters at 3250 East Broadway, Vancouver 12. Our new offices have an area of 10,000 square feet, with public parking facilities. These new premises have enabled us to improve our service to the public with greater efficiency.

I would like to thank the members of the various fire and police departments, the British Columbia Research Council, the National Harbours Board, Civil Defence Organization, and my own staff for excellent co-operation during the year. I would also like to thank members of the Royal Canadian Mounted Police, especially those who are Local Assistants to the Fire Marshal, municipal police in the Province, Local Assistants to the Fire Marshal, insurance companies and their adjusters, and the Fire Underwriters' Investigation Bureau for co-operation throughout the year.

I have the honour to be,
Sir,
Your obedient servant,
BASIL NIXON,
Fire Marshal.

TABLE I.—FIRES INVESTIGATED

			Totals
A. Total number of fires investigated throughout the Province			563
B. Fires investigated by the Office of the Fire Marshal:			
Accident or negligence		95	
Incendiary		188	
Unknown		94	
			377
C. Charges laid throughout the Province:	Adults	Juveniles	
Number of persons charged	42	32	74
Number of charges laid	47	36	83
Arson	28	12	
Setting fire to other substances	10	21	
Other offences	9	3	
Disposition of charges—			
Convicted	32	21	
Dismissed	5	5	
Acquitted	2	---	
Withdrawn	---	---	
Stay of proceedings	4	---	
Committed	1	---	
Pending	2	---	
Probation	---	8	
Died pending trial	1	---	
Settled out of Court	---	2	
Persons not charged but committed to mental hospital or institution	8	2	

D. Fire crime statistics. (The following record is compiled by the Fire Marshal Office for the Dominion Bureau of Statistics and represents all fire-crime investigations throughout the Province.)

Offence	Suspected or Known Incendiary	Unfounded	Actual Number	Offences Cleared		Persons Charged			
				By Charge	Otherwise	Adult		Juvenile	
						M.	F.	M.	F.
Arson and attempted arson	339	85	254	56	35	36	6	31	1

TABLE II.—INSPECTIONS MADE AND ORDERS ISSUED BY LOCAL ASSISTANTS TO THE FIRE MARSHAL

City Municipalities (31)

Districts Reporting	Inspections	Orders	Districts Reporting	Inspections	Orders
Armstrong	79	—	New Westminster	7,537	2
Chilliwack	1,257	1	North Vancouver	4,041	2
Courtenay	67	—	Penticton	972	1
Cranbrook	995	1	Port Alberni	208	1
Dawson Creek	1,354	—	Port Coquitlam	687	1
Duncan	11	—	Port Moody	180	—
Enderby	—	—	Prince George	1,449	1
Fernie	150	2	Prince Rupert	690	2
Grand Forks	53	—	Revelstoke	188	2
Greenwood	3	—	Rossland	—	—
Kamloops	723	4	Trail	111	—
Kelowna	1,307	—	Vancouver	25,615	31
Kimberley	629	4	Vernon	1,090	2
Langley	1	1	Victoria	11,426	5
Nanaimo	1,254	—	White Rock	359	—
Nelson	1,378	—			
			Totals	63,814	63

District Municipalities (39)

Burnaby	9,584	—	North Vancouver	570	33
Campbell River	401	—	Oak Bay	2,194	12
Central Saanich	60	—	Peachland	—	—
Chilliwhack	623	—	Pitt Meadows	—	—
Coldstream	22	—	Port Alice	—	—
Coquitlam	—	—	Port Hardy	—	—
Delta	1,987	—	Powell River	—	—
Esquimalt	462	—	Richmond	440	1
Fraser Mills	—	—	Saanich	253	6
Gold River	32	—	Salmon Arm	—	—
Hudson's Hope	11	1	Spallumcheen	45	—
Kent	—	—	Sparwood	—	—
Kitimat	1,282	—	Squamish	—	—
Langley	—	—	Sumas	63	—
Mackenzie	—	—	Summerland	—	—
Maple Ridge	292	—	Surrey	3,468	3
Matsqui	—	—	Tadanac	69	—
Mission	1	—	Terrace	540	3
North Cowichan	370	—	West Vancouver	72	—
North Saanich	—	—			
			Totals	22,841	59

Town Municipalities (13)

Castlegar	—	—	Merritt	69	—
Comox	—	—	Mission City	59	3
Creston	62	3	Quesnel	618	8
Fort St. John	199	—	Sidney	—	—
Hope	—	—	Smithers	—	—
Kinnaird	62	—	Williams Lake	105	2
Ladysmith	51	—			
			Totals	1,225	16

TABLE II.—INSPECTIONS MADE AND ORDERS ISSUED BY LOCAL ASSISTANTS TO THE FIRE MARSHAL—*Continued*

Village Municipalities (57)

Districts Reporting	Inspections	Orders	Districts Reporting	Inspections	Orders
Abbotsford	81	—	Montrose	52	—
Aennofield	—	—	Nakusp	2	—
Alert Bay	—	—	New Denver	—	—
Ashcroft	17	1	Oliver	—	—
Burns Lake	—	—	100 Mile House	—	—
Cache Creek	—	—	Osoyoos	—	—
Chapman Camp	14	1	Parksville	765	—
Chetwynd	—	—	Pemberton	—	—
Clinton	—	—	Port Edward	—	—
Cumberland	5	—	Port McNeill	—	—
Fort St. James	—	—	Pouce Coupe	4	—
Fraser Lake	95	—	Princeton	66	—
Fruitvale	—	—	Qualicum Beach	—	—
Gibsons	—	—	Salmo	—	—
Golden	—	—	Salmon Arm	133	20
Harrison Hot Springs	—	—	Sechelt	—	—
Hazelton	—	—	Silverton	—	—
Houston	—	—	Slocan	—	—
Invermere	—	—	South Fort George	—	—
Kaslo	9	—	Stewart	156	—
Keremeos	9	1	Taylor	—	—
Lake Cowichan	10	—	Telkwa	—	—
Lillooet	—	—	Tofino	—	—
Lumby	—	—	Ucluelet	1	—
Lytton	—	—	Valemount	—	—
McBride	4	—	Vanderhoof	—	—
Marysville	205	—	Warfield	19	—
Masset	—	—	Zeballos	—	—
Midway	—	—			
			Totals	1,647	23

Fire Districts (17)

Cariboo, County of	85	3	Sooke	—	—
Colwood	—	—	University Area	1,193	—
Ioco	—	—	Vancouver, County of	—	—
Kootenay, County of	224	2	Vernon	—	—
Langford	62	5	Victoria, County of	—	—
Nanaimo, County of	47	—	View Royal	—	—
Ocean Falls	680	—	Westminster, County of	—	—
Prince George	—	—	Yale, County of	240	—
Prince Rupert, County of	16	1			
			Totals	2,547	11

	Inspections	Orders
Grand totals, 1968	92,074	172
Grand totals, 1967	85,969	529
Grand totals, 1966	84,874	603
Grand totals, 1965	83,678	178
Grand totals, 1964	82,758	151
Grand totals, 1963	92,088	100
Grand totals, 1962	88,441	192
Grand totals, 1961	93,826	196
Grand totals, 1960	95,259	154
Grand totals, 1959	91,330	498

TABLE III.—FIRES REPORTED

City Municipalities (31)

Districts Reporting	Number	Amount of Loss	Districts Reporting	Number	Amount of Loss
Armstrong	10	$26,978	New Westminster	82	$515,538
Chilliwack	27	145,963	North Vancouver	119	106,348
Courtenay	14	307,458	Penticton	63	23,154
Cranbrook	9	3,188	Port Alberni	80	90,864
Dawson Creek	48	562,017	Port Coquitlam	43	29,539
Duncan	13	364,140	Port Moody	22	31,770
Enderby	1	127	Prince George	198	119,562
Fernie	9	51,753	Prince Rupert	42	701,494
Grand Forks	5	8,369	Revelstoke	20	36,247
Greenwood	1	29	Rossland	10	1,735
Kamloops	71	52,454	Trail	34	82,000
Kelowna	72	64,015	Vancouver	1,687	2,693,914
Kimberley	19	123,148	Vernon	35	29,108
Langley	3	1,047	Victoria	230	595,752
Nanaimo	67	75,021	White Rock	22	46,946
Nelson	25	9,415			
			Totals	3,081	$6,899,093

District Municipalities (39)

Burnaby	434	$408,217	North Vancouver	233	$286,195
Campbell River	38	31,501	Oak Bay	50	63,894
Central Saanich	8	19,121	Peachland	3	1,227
Chilliwhack	70	116,616	Pitt Meadows	5	12,337
Coldstream	9	1,240	Port Alice	1	50
Coquitlam	77	41,774	Port Hardy	2	131
Delta	97	278,775	Powell River	18	304,977
Esquimalt	41	20,980	Richmond	155	520,571
Fraser Mills	----	----------	Saanich	206	206,034
Gold River	3	1,430	Salmon Arm	12	18,905
Hudson's Hope	6	21,730	Spallumcheen	3	4,985
Kent	6	7,109	Sparwood	4	37,320
Kitimat	25	71,707	Squamish	2	399
Langley	56	232,753	Sumas	13	108,599
Mackenzie	3	23,655	Summerland	14	97,400
Maple Ridge	91	143,921	Surrey	329	313,371
Matsqui	38	76,355	Tadanac	31	11,149
Mission	11	251,009	Terrace	41	299,635
North Cowichan	29	61,611	West Vancouver	128	197,142
North Saanich	9	2,451			
			Totals	2,301	$4,296,276

Town Municipalities (13)

Castlegar	5	$2,128	Merritt	14	$21,640
Comox	7	10,157	Mission City	20	65,498
Creston	9	162,600	Quesnel	17	259,041
Fort St. John	19	124,044	Sidney	9	18,458
Hope	6	2,863	Smithers	16	46,935
Kinnaird	2	6,172	Williams Lake	38	34,147
Ladysmith	11	10,139			
			Totals	173	$763,822

TABLE III.—FIRES REPORTED—*Continued*

Village Municipalities (57)

Districts Reporting	Number	Amount of Loss	Districts Reporting	Number	Amount of Loss
Abbotsford	18	$59,895	Montrose	3	$542
Aennofield	2	2,594	Nakusp	1	425
Alert Bay	2	20,000	New Denver	1	250
Ashcroft	8	13,673	Oliver	5	9,184
Burns Lake	5	91,366	100 Mile House	----	----
Cache Creek	1	50	Osoyoos	4	1,231
Chapman Camp	----	----	Parksville	4	3,811
Chetwynd	3	300	Pemberton	----	----
Clinton	8	32,774	Port Edward	----	----
Cumberland	6	1,640	Port McNeill	----	----
Fort St. James	----	----	Pouce Coupe	4	5,350
Fraser Lake	3	60,700	Princeton	9	22,452
Fruitvale	----	----	Qualicum Beach	5	3,291
Gibsons	6	10,200	Salmo	6	899
Golden	6	160,951	Salmon Arm	11	51,532
Harrison Hot Springs	4	2,600	Sechelt	1	523
Hazelton	----	----	Silverton	----	----
Houston	8	407,699	Slocan	----	----
Invermere	----	----	South Fort George	2	13,549
Kaslo	2	103,367	Stewart	1	400
Keremeos	----	----	Taylor	2	3,916
Lake Cowichan	5	14,682	Telkwa	1	579
Lillooet	5	247,196	Tofino	1	300
Lumby	2	238	Ucluelet	2	352
Lytton	2	2,637	Valemount	2	12,264
McBride	5	43,783	Vanderhoof	4	15,333
Marysville	1	9,000	Warfield	4	14,446
Masset	2	9,100	Zeballos	1	400
Midway	----	----			
			Totals	178	$1,455,474

Fire Districts (17)

Cariboo, County of	358	$2,478,117	University Area	37	$56,636
Colwood	17	8,704	Vancouver, County of	67	434,296
Ioco	4	2,990	Vernon	----	----
Kootenay, County of	109	1,305,742	Victoria, County of	30	320,394
Langford	20	17,803	View Royal	15	4,306
Nanaimo, County of	209	1,041,556	Westminster, County of	40	64,021
Ocean Falls	----	----	Yale, County of	249	857,290
Prince George	----	----			
Prince Rupert, County of	117	1,085,452	Totals	1,277	$7,702,306
Sooke	5	24,999			
			Grand Totals	7,010	$21,116,971

Construction of Buildings Burned

	Number	Amount of Loss
Fire resistive—		
City municipalities	38	$21,274
District municipalities	30	9,287
Town municipalities	----	----------
Village municipalities	----	----------
Fire districts	12	42,172
Brick, concrete, or heavy timber—		
City municipalities	275	1,179,052
District municipalities	60	199,370
Town municipalities	5	24,062
Village municipalities	7	1,817
Fire districts	6	84,367
Wood frame—		
City municipalities	2,008	5,195,123
District municipalities	1,620	3,764,219
Town municipalities	127	712,984
Village municipalities	129	1,408,623
Fire districts	841	6,111,180
Metal or corrugated iron—		
City municipalities	760	503,644
District municipalities	591	323,400
Town municipalities	41	26,776
Village municipalities	41	44,984
Fire districts	419	1,464,637
Totals	7,010	$21,116,971

TABLE IV.—CAUSES OF FIRES

Causes of Fires	Number	Amount of Loss	Total Number	Total Amount of Loss
Aeroplane crash			1	$130,000
Boilers or boiler-pipes defective or overheated			5	2,075
Candles and open flames			68	92,668
Chemical explosion			4	2,890
Children playing with fire			16	30,682
Chimneys—				
Defective or overheated	76	$193,520		
Sparks from	21	45,069		
			97	238,589
Collision			20	127,746
Defective battery connection			3	843
Defective muffler			6	8,978
Defective wiring			130	469,711
Electrical appliances and equipment (improper use of appliance or defective equipment)			422	584,466
Electrical wiring overloaded			13	21,600
Electro-welding equipment, sparks from			4	15,555
Engine backfiring			305	194,676
Exposure			146	726,809
Fireplaces—				
Defective	21	$24,157		
Sparks from	132	113,667		
			153	137,824
Fireworks			38	11,256
Friction—				
In brake drum	8	$25,931		
In conveyer belt	3	2,732		
In machinery	8	76,658		
In pulley	1	198		
In tires	17	28,988		
			37	134,507
Furnaces or furnace-pipes—				
Combustible materials too near	24	$51,834		
Defective	16	146,912		
Insufficiently protected	23	109,105		
Sparks from	10	17,663		
			73	325,514
Gas, liquefied petroleum—				
Explosion	11	$197,890		
Improper installation of appliance	2	408		
Improper use of or defective equipment	48	319,322		
			61	517,620
Gas, natural—				
Explosion	4	$2,245		
Improper installation of appliance	7	6,076		
Improper use of or defective equipment	17	37,818		
			28	46,139
Gasoline—				
Broken line	171	$194,081		
Carelessness with	77	105,247		
On exhaust pipe	44	39,550		
Pump damaged by motor-vehicle	3	457		
Stoves, lamps, torches	13	53,311		
Used in cleaning	9	35,459		
Used to kindle fire	4	2,822		
Vapour explosion	44	357,573		
			365	788,500
Heat radiation			28	6,524
Hot ashes, coals, etc.			34	21,531
Hot grease, oil, tar, etc., ignition of			475	414,674
Incendiary			245	872,083
Inflammable vapours, ignition of			51	62,214
Kerosene—				
Carelessness with	4	$27,363		
Stoves, lamps, torches	3	534		
Used to kindle fire	2	1,766		
			9	29,663

TABLE IV.—CAUSES OF FIRES—*Continued*

Causes of Fires	Number	Amount of Loss	Total Number	Total Amount of Loss
Lightning			19	$53,524
Matches—				
Carelessness with	30	$21,875		
Children with	247	342,770		
			277	364,645
Molten metal			3	3,160
Motor-vehicle upset			16	55,575
Oil-burners—				
Broken line	3	$4,851		
Defective	103	389,051		
Defective equipment	48	163,271		
Explosion	43	96,752		
Sparks from	3	12,248		
			200	666,173
Oxy-gas welding or cutting equipment, etc.—				
Defective	4	$1,382		
Improper use of	3	6,050		
Sparks from	56	1,304,095		
			63	1,311,527
Short circuit			670	1,644,341
Smokers' carelessness—				
In bed	291	$265,419		
In the home	813	547,429		
In unlisted locations	451	1,020,686		
While intoxicated	17	49,037		
			1,572	1,882,571
Sparks from bonfire			62	54,575
Sparks from bush fire			5	23,327
Sparks from engine			1	3,000
Sparks from forge			1	706
Sparks from grinder			4	20,820
Sparks from mill burner			23	192,813
Spontaneous ignition			27	232,305
Steam or other pipes insufficiently protected			4	24,490
Stoves or stove-pipes—				
Combustible materials too near	117	$57,357		
Defective	20	50,309		
Explosion	4	18,956		
Insufficiently protected	87	228,070		
Sparks from	12	19,282		
			240	373,974
Sulphur, ignition of			2	820
Thawing pipes			83	225,823
Unknown			901	7,967,465
Totals			7,010	$21,116,971

TABLE V.—CLASSIFICATION OF PROPERTY BURNED AND CAUSES

Property		Causes		Amount of Loss	
Airports and hangars	2	Aeroplane crash	1	$130,000	
		Spontaneous ignition	1	2,428	
					$132,428
Amusement parks	1	Incendiary	1		126,930
Apartments	370	Candles and open flames	6	$6,058	
		Children playing with fire	1	150	
		Chimneys—			
		Defective	1	850	
		Sparks from	1	1,200	
		Electrical appliances	18	11,662	
		Exposure	5	1,317	
		Fireplaces—			
		Defective	1	3,409	
		Sparks from	4	6,194	
		Fireworks	1	225	
		Furnaces or furnace-pipes—			
		Combustible materials too near	1	60	
		Defective	1	844	
		Sparks from	1	600	
		Gas, liquefied petroleum—			
		Explosion	1	175	
		Improper use of or defective equipment	3	20,522	
		Gas, natural—			
		Explosion	2	1,871	
		Improper use of or defective equipment	1	25	
		Gasoline—			
		Carelessness with	1	25	
		Used to kindle fire	1	1,957	
		Heat radiation	1	272	
		Hot grease, oil, tar, etc., ignition of	46	32,782	
		Incendiary	16	17,385	
		Matches, Children with	10	16,456	
		Oil-burners—			
		Defective	3	1,299	
		Defective equipment	2	1,449	
		Explosion	1	321	
		Oxy-gas welding or cutting equipment, sparks from	1	5,124	
		Short circuit	21	25,080	
		Smokers' carelessness	176	233,514	
		Spontaneous ignition	1	25	
		Stoves or stove-pipes—			
		Combustible materials too near	9	1,767	
		Insufficiently protected	3	1,377	
		Thawing pipes	5	6,320	
		Unknown	25	88,287	
					488,602
Asphalt plants and tanks	3	Hot tar, ignition of	1	$113	
		Unknown	2	70,000	
					70,113
Bakeries	2	Electrical appliances	1	$214	
		Exposure	1	217	
					431
Banks	4	Incendiary	1	$100	
		Short circuit	1	50	
		Smoker's carelessness	1	500	
		Sparks from bonfire	1	100	
					750
Barber shops and beauty parlours	3	Exposure	1	$415	
		Short circuit	1	524	
		Spontaneous ignition	1	10,585	
					11,524
Barges and scows	4	Exposure	1	$300	
		Gasoline carelessness	1	2,500	
		Oxy-gas welding equipment, sparks from	1	200	
		Unknown	1	15,000	
					18,000
Barns and stables	57	Electrical appliances	2	$11,550	
		Fireworks	1	895	
		Gas, liquefied petroleum, explosion	1	6,400	

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

Property		Causes		Amount of Loss	
		Incendiary	3	$1,715	
		Matches, children with	11	15,765	
		Oil-burner explosion	1	7,000	
		Smokers' carelessness	2	325	
		Sparks from bonfire	5	1,909	
		Spontaneous ignition	5	19,216	
		Steam-pipes insufficiently protected	1	50	
		Stove, combustible materials too near	1	738	
		Thawing pipes	1	70,000	
		Unknown	23	72,632	
					$208,195
Barracks	1	Smoker's carelessness	1		7,000
Bath-houses	1	Stove insufficiently protected	1		300
Boarding-houses	2	Smokers' carelessness	2		1,076
Boat-building works	10	Incendiary	1	$3,143	
		Inflammable vapours, ignition of	1	15	
		Unknown	8	34,990	
					38,148
Boat-houses	1	Short circuit	1		2,700
Bowling alleys	1	Incendiary	1		85
Breweries	1	Gasoline, broken line	1		112
Bridges	6	Incendiary	1	$400	
		Smoker's carelessness	1	7,000	
		Unknown	4	63,261	
					70,661
Buildings under construction	6	Gas, liquefied petroleum, improper use of or defective equipment	2	$1,142	
		Inflammable vapours, ignition of	1	800	
		Matches, children with	1	100	
		Unknown	2	46,642	
					48,684
Bunkhouses	13	Defective wiring	1	$6,500	
		Exposure	2	3,500	
		Gas, liquefied petroleum, defective equipment	1	3,100	
		Oil-burner explosion	1	2,283	
		Smoker's carelessness	1	6,829	
		Stove insufficiently protected	2	6,885	
		Unknown	5	195,372	
					224,469
Canneries (fish)	1	Electrical equipment	1		2,000
Cement plants	2	Hot ashes	1	$800	
		Oxy-gas welding or cutting equipment, sparks from	1	3,277	
					4,077
Chemical plants	5	Short circuit	2	$175	
		Sulphur, ignition of	1	500	
		Unknown	2	11,100	
					11,775
Churches and church properties	14	Electrical appliances	2	$11,925	
		Exposure	1	500	
		Hot grease, ignition of	1	175	
		Incendiary	2	125	
		Short circuit	1	250	
		Sparks from bonfire	1	247	
		Stoves or stove-pipes—			
		Combustible materials too near	1	55	
		Insufficiently protected	1	179	
		Unknown	4	23,763	
					37,219
Clubhouses (golf, yacht, etc.)	3	Oil-burner explosion	1	$942	
		Smoker's carelessness	1	17,197	
		Unknown	1	14	
					18,153
Clubs	4	Exposure	1	$31,590	
		Oil-burner explosion	1	630	
		Smokers' carelessness	2	30	
					32,250

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

Property		Causes		Amount of Loss	
Coal and lumber yards	5	Exposure	1	$7,797	
		Incendiary	1	30	
		Oxy-gas welding or cutting equipment, sparks from	1	600	
		Sparks from bonfire	1	500	
		Sparks from mill burner	1	100	
					$9,027
Cold-storage plants	1	*Short circuit*	1		11,531
Compressors	2	Gasoline carelessness	1	$78	
		Hot grease, ignition of	1	3,076	
					3,154
Cookhouses	1	Unknown	1		125,000
Copper-mills	2	Furnace, sparks from	2		400
Dairies	1	Matches, children with	1		25
Dredges	1	Electrical equipment	1		244
Dry-cleaning plants	2	Electrical appliances	1	$75	
		Exposure	1	2,158	
					2,233
Dwellings	3,259	Candles and open flames	54	$26,990	
		Chemical explosion	2	890	
		Children playing with fire	14	30,117	
		Chimneys—			
		Defective or overheated	67	154,740	
		Sparks from	19	42,737	
		Defective wiring	38	150,337	
		Electrical appliances and equipment	297	227,425	
		Electrical wiring overloaded	10	19,910	
		Exposure	34	30,404	
		Fireplaces—			
		Defective	20	20,748	
		Sparks from	128	107,473	
		Fireworks	22	4,290	
		Furnaces or furnace-pipes—			
		Combustible materials too near	11	38,884	
		Defective	11	37,008	
		Insufficiently protected	16	30,155	
		Sparks from	5	15,587	
		Gas, liquefied petroleum—			
		Explosion	1	250	
		Improper use of or defective equipment	18	58,814	
		Gas, natural—			
		Explosion	2	374	
		Improper installation of appliance	4	1,178	
		Improper use of or defective equipment	15	32,320	
		Gasoline—			
		Broken line	1	85	
		Carelessness with	28	53,909	
		Stoves, lamps, torches	9	44,447	
		Used in cleaning	5	33,205	
		Used to kindle fire	1	300	
		Vapour explosion	2	9,077	
		Heat radiation	16	4,309	
		Hot ashes, coals, etc.	25	7,201	
		Hot grease, oil, tar, etc., ignition of	360	259,845	
		Incendiary	65	251,188	
		Inflammable vapours, ignition of	30	48,103	
		Kerosene—			
		Carelessness with	2	21,647	
		Stoves, lamps, torches	3	534	
		Used to kindle fire	2	1,766	
		Lightning	18	33,524	
		Matches—			
		Carelessness with	20	6,309	
		Children with	139	203,129	
		Molten metal	1	129	
		Oil-burners—			
		Broken line	2	234	
		Defective	62	150,027	
		Defective equipment	30	38,709	
		Explosion	30	61,517	
		Sparks from	1	2,198	

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

Property		Causes		Amount of Loss	
		Oxy-gas welding or cutting equipment—			
		Defective	1	$355	
		Sparks from	2	2,368	
		Short circuit	215	378,734	
		Smokers' carelessness—			
		In bed	123	122,836	
		In the home	677	414,020	
		In unlisted locations	28	16,657	
		While intoxicated	10	36,211	
		Sparks from bonfire	24	15,663	
		Sparks from bush fire	3	768	
		Sparks from mill burner	1	160	
		Spontaneous ignition	6	6,468	
		Stoves or stove-pipes—			
		Combustible materials too near	96	42,110	
		Defective	17	27,894	
		Explosion	4	18,956	
		Insufficiently protected	66	173,349	
		Sparks from	10	15,673	
		Thawing pipes	59	97,322	
		Unknown	277	1,581,030	
					$5,212,597
Electric-light plants	8	Short circuit	4	$20,794	
		Unknown	4	8,998	
					29,792
Electric-light and telephone poles	3	Exposure	1	$3,465	
		Short circuit	1	3,000	
		Unknown	1	600	
					7,065
Electrical manufacturing plants	2	Electrical equipment	1	$300	
		Hot oil, ignition of	1	100	
					400
Elevators	3	Friction in conveyer belt	1	$1,198	
		Friction in machinery	1	1,540	
		Unknown	1	7,332	
					10,070
Elevators (grain)	1	Unknown	1		3,432
Factories (bed and mattress)	2	Smoker's carelessness	1	$3,343	
		Unknown	1	2,953	
					6,296
Factories (clay products)	1	Chimney, sparks from	1		1,132
Factories (electro-plating)	1	Sparks from grinder	1		10,367
Factories (food products)	5	Electrical appliances	1	$150	
		Hot oil, ignition of	1	615	
		Incendiary	1	30,703	
		Unknown	2	2,180	
					33,648
Factories (furniture)	9	Exposure	1	$264	
		Furnace, sparks from	1	425	
		Matches, children with	1	20	
		Oil-burner, defective	1	4,596	
		Oxy-gas welding or cutting equipment, sparks from	1	1,694	
		Smoker's carelessness	1	1,127	
		Steam-pipes insufficiently protected	1	23,840	
		Unknown	2	71,444	
					103,410
Factories (glass)	1	Incendiary	1		3,102
Factories (industrial equipment)	1	Oxy-gas welding or cutting equipment, sparks from	1		75
Factories (paint)	2	Inflammable vapours, ignition of	2		1,882
Factories (paper products)	3	Friction in machinery	1	5,000	
		Inflammable vapours, ignition of	2	884	
					5,884
Factories (pipe-wrapping)	1	Unknown	1		1,134

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

Property		Causes		Amount of Loss	
Factories (pre-cast concrete)	2	Oxy-gas welding or cutting equipment, sparks from	1	$101	
		Short circuit	1	54,588	
					$54,689
Factories (rock-wool insulation)	1	Electrical equipment	1		100
Factories (sash and door)	1	Gas, liquefied petroleum, improper use of or defective equipment	1		13,011
Factories (upholstery)	3	Exposure	1	$11,160	
		Incendiary	1	550	
		Unknown	1	19,100	
					30,810
Factories (veneer and plywood)	4	Electrical equipment	1	$300	
		Incendiary	1	8,583	
		Inflammable vapours, ignition of	1	4,500	
		Unknown	1	100	
					13,483
Factories (wood-box)	1	Unknown	1		47,000
Fences	19	Exposure	1	$750	
		Fireworks	2	50	
		Furnace, combustible materials too near	2	75	
		Incendiary	1	25	
		Matches—			
		Carelessness with	1	99	
		Children with	1	50	
		Smokers' carelessness	2	90	
		Sparks from bonfire	3	135	
		Unknown	6	458	
					1,732
Fish-curing plants	1	Stove, sparks from	1		1,474
Fishing-boats	48	Electrical appliances	1	$1,200	
		Engine backfiring	4	23,770	
		Exposure	1	100	
		Fireworks	1	35	
		Gas, liquefied petroleum, improper use of or defective equipment	1	18,000	
		Gasoline—			
		Broken line	1	2,500	
		Carelessness with	3	11,600	
		On exhaust-pipe	1	500	
		Stove	1	2,600	
		Vapour explosion	9	38,292	
		Hot grease, ignition of	2	6,300	
		Oil-burners—			
		Defective	3	57,000	
		Defective equipment	3	17,125	
		Short circuit	5	22,414	
		Smokers' carelessness	2	5,136	
		Stove, combustible materials too near	1	2,000	
		Unknown	9	123,556	
					332,128
Flour, feed, and rice mills	2	Electrical appliances	1	$125,778	
		Incendiary	1	2,700	
					128,478
Foundries	2	Oxy-gas welding or cutting equipment, sparks from	1	$93	
		Sparks from grinder	1	9,917	
					10,010
Fruit-packing plants	2	Matches, children with	1	$14,510	
		Unknown	1	209	
					14,719
Gaols and industrial institutions	7	Incendiary	6	$255	
		Unknown	1	25,800	
					26,055
Garages (private)	121	Chimney, defective	1	$2,100	
		Defective wiring	3	8,075	
		Electrical appliances	2	1,312	
		Electrical wiring overloaded	1	200	
		Exposure	4	1,236	
		Fireworks	2	1,075	

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

Property		Causes		Amount of Loss	
		Furnaces or furnace-pipes—			
		Combustible materials too near	2	$1,031	
		Sparks from	1	651	
		Gasoline—			
		Carelessness with	5	6,445	
		Used in cleaning	3	833	
		Hot ashes, coals, etc.	2	958	
		Incendiary	18	23,268	
		Inflammable vapours, ignition of	1	745	
		Kerosene carelessness	1	5,216	
		Matches, children with	18	10,922	
		Oil-burner, defective equipment	1	900	
		Oxy-gas welding or cutting equipment, sparks from	3	54,088	
		Short circuit	5	3,351	
		Smokers' carelessness	5	2,282	
		Sparks from bonfire	5	4,417	
		Spontaneous ignition	1	700	
		Stoves or stove-pipes—			
		Combustible materials too near	1	3,000	
		Defective	1	1,800	
		Insufficiently protected	3	14,034	
		Unknown	32	36,081	
					$184,720
Garages (public)	22	Chimney, defective	1	$50	
		Electro-welding equipment, sparks from	1	8,354	
		Gas, liquefied petroleum, improper use of or defective equipment	1	15	
		Gasoline—			
		Carelessness	4	3,795	
		Used in cleaning	1	1,421	
		Vapour explosion	1	235	
		Incendiary	2	23,433	
		Inflammable vapours, ignition of	2	200	
		Oxy-gas welding or cutting equipment, sparks from	3	11,659	
		Short circuit	1	4,800	
		Smokers' carelessness	2	13,560	
		Unknown	3	74,059	
					141,581
Gasoline stations (service)	21	Electrical appliances	1	$5,849	
		Exposure	1	100	
		Gasoline—			
		Broken line	1	19,688	
		Carelessness with	2	2,010	
		Pump damaged by motor-vehicle	3	457	
		Vapour explosion	2	81,020	
		Incendiary	2	70,010	
		Oil-burner, defective	1	500	
		Oxy-gas welding or cutting equipment—			
		Improper use of	1	400	
		Sparks from	3	26,505	
		Short circuit	1	24,752	
		Smoker's carelessness	1	4,439	
		Sparks from grinder	1	411	
		Unknown	1	200	
					236,341
Grandstands	1	Incendiary	1		1,500
Greenhouses	5	Oil-burner, defective	3	$2,372	
		Short circuit	1	5,100	
		Spontaneous ignition	1	500	
					7,972
Halls	15	Incendiary	2	$35,063	
		Matches, children with	1	504	
		Oxy-gas welding or cutting equipment, sparks from	1	3,804	
		Short circuit	1	8,600	
		Smokers' carelessness	5	684,412	
		Sparks from bonfire	1	60	
		Unknown	4	189,160	
					921,603

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

Property		Causes		Amount of Loss	
Haystacks and balers	1	Incendiary	1		$5,000
Hospitals, institutions, and nursing-homes	58	Defective wiring	1	$25	
		Electrical appliances	4	212	
		Incendiary	2	125	
		Inflammable vapours, ignition of	1	10	
		Match carelessness	2	40	
		Short circuit	2	2,268	
		Smokers' carelessness	44	5,251	
		Stove, combustible materials too near	1	25	
		Thawing pipes	1	20	
					7,976
Hotels	97	Candle carelessness	1	$280	
		Electrical appliances	3	491	
		Furnace insufficiently protected	1	39,000	
		Gas, liquefied petroleum, improper use of or defective equipment	1	200	
		Hot grease, ignition of	1	1,098	
		Incendiary	6	5,257	
		Oil-burners—			
		Defective	1	65	
		Defective equipment	2	1,129	
		Short circuit	1	678	
		Smokers' carelessness	71	77,228	
		Stove, combustible materials too near	2	1,535	
		Unknown	7	328,070	
					455,031
Houseboats	1	Gasoline-vapour explosion	1		32,000
Knitting-mills	1	Electrical equipment	1		853
Laboratories (research)	2	Electrical appliances	1	$622	
		Furnace, defective	1	61,000	
					61,622
Launches and other small craft	39	Collision	1	$136	
		Defective wiring	1	1,000	
		Electrical appliances	3	6,643	
		Engine backfiring	3	16,895	
		Fireworks	2	331	
		Gasoline—			
		Broken line	2	6,993	
		Vapour explosion	10	32,308	
		Incendiary	2	6,275	
		Oil-burner, defective	2	30,000	
		Short circuit	3	11,585	
		Smoker's carelessness	1	3,000	
		Unknown	9	34,828	
					149,994
Laundries	10	Electrical appliances	4	$539	
		Gas, liquefied petroleum, improper use of or defective equipment	2	4,432	
		Incendiary	1	25	
		Unknown	3	3,066	
					8,062
Libraries	1	Matches, children with	1		113
Logging camps	6	Oil-burner, defective equipment	1	$81,888	
		Smoker's carelessness	1	417	
		Sparks from bush fire	1	22,409	
		Unknown	3	20,113	
					124,827
Machine shops	9	Electrical wiring overloaded	1	$97	
		Exposure	1	522	
		Heat radiation	1	220	
		Oxy-gas welding or cutting equipment, sparks from	1	70,000	
		Short circuit	1	7,431	
		Sparks from bonfire	1	100	
		Unknown	3	85,645	
					164,015
Meat-packing plants	1	Gasoline carelessness	1		274
Medical clinics	3	Electrical appliances	1	$500	
		Exposure	1	13,460	
		Inflammable vapours, ignition of	1	50	
					14,010

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

Property		Causes		Amount of Loss	
Mines and mining properties	6	Friction in machinery	2	$45,451	
		Oil-burner, defective	1	1,449	
		Oxy-gas welding or cutting equipment, sparks from	1	63,345	
		Short circuit	1	671	
		Unknown	1	863	
					$111,779
Motor courts	61	Defective wiring	1	$68,961	
		Electrical appliances	3	704	
		Exposure	1	3,972	
		Furnace, combustible materials too near	2	286	
		Gas, liquefied petroleum, improper use of or defective equipment	3	1,420	
		Heat radiation	1	11	
		Hot grease, ignition of	5	880	
		Inflammable vapours, ignition of	2	1,365	
		Matches, children with	1	3,939	
		Oil-burners—			
		Defective	1	2,075	
		Defective equipment	1	122	
		Short circuit	3	3,048	
		Smokers' carelessness	30	14,123	
		Sparks from bush fire	1	150	
		Thawing pipes	2	7,007	
		Unknown	4	838	
					108,901
Motor-vehicles (*1,703)— Automobiles (passenger)	1,321	Collision	11	$17,050	
		Defective battery connection	2	793	
		Defective muffler	1	178	
		Defective wiring	55	12,826	
		Electrical appliances	25	14,089	
		Electro-welding equipment, sparks from	1	300	
		Engine backfiring	250	107,111	
		Exposure	33	30,221	
		Fireworks	3	1,607	
		Friction—			
		In brake drum	6	1,107	
		In tires	6	9,030	
		Gasoline—			
		Broken line	129	51,198	
		Carelessness with	8	1,120	
		On exhaust pipe	32	11,572	
		Vapour explosion	14	4,778	
		Heat radiation	2	903	
		Hot grease, oil, tar, etc., ignition of	14	8,006	
		Incendiary	37	26,297	
		Matches—			
		Carelessness with	2	325	
		Children with	5	623	
		Motor-vehicle upset	9	13,100	
		Open flame	2	450	
		Oxy-gas welding or cutting equipment, sparks from	5	6,905	
		Short circuit	269	91,429	
		Smokers' carelessness	228	37,064	
		Sparks from bonfire	2	2,775	
		Thawing pipes	1	45	
		Unknown	169	88,081	
				$538,983	
Buses	5	Friction in tires	1	$1,776	
		Gasoline, broken line	1	75	
		Short circuit	2	516	
		Unknown	1	8,500	
				$10,867	
Campers	10	Gas, liquefied petroleum—			
		Explosion	3	$9,529	
		Improper installation of appliance	1	308	
		Improper use of or defective equipment	3	4,780	

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

Property		Causes		Amount of Loss
Motor-vehicles—*Continued*		Gasoline on exhaust-pipe	1	$225
		Incendiary	1	75
		Unknown	1	275
				$15,192
Motor-cycles	17	Defective battery connection	1	$50
		Engine backfiring	4	1,845
		Exposure	1	100
		Gasoline—		
		Broken line	4	635
		Carelessness with	3	140
		On exhaust-pipe	1	400
		Motor-vehicle upset	1	450
		Short circuit	1	20
		Unknown	1	250
				$3,890
Tractors (bulldozers, graders, mowers, etc.)	85	Defective wiring	4	$1,631
		Electrical appliances	1	199
		Electro-welding equipment, sparks from	1	1,901
		Engine backfiring	9	18,312
		Exposure	1	600
		Friction in tires	2	1,470
		Gasoline—		
		Broken line	6	17,671
		Carelessness with	6	1,126
		On exhaust-pipe	2	602
		Hot grease, ignition of	2	3,465
		Incendiary	1	4,000
		Oxy-gas welding or cutting equipment—		
		Improper use of	1	150
		Sparks from	3	7,208
		Short circuit	19	41,688
		Sparks from bonfire	2	19,291
		Unknown	25	167,664
				$286,978
Trailers and semi-trailers	10	Collision	1	$31,000
		Engine backfiring	1	250
		Friction in tires	2	5,589
		Gasoline carelessness	1	1,140
		Hot ashes	1	150
		Motor-vehicle upset	1	1,500
		Short circuit	1	6,500
		Smoker's carelessness	1	2,436
		Unknown	1	150
				$48,715
Trucks	255	Collision	7	$79,560
		Defective muffler	5	8,800
		Defective wiring	18	5,935
		Electrical appliances	3	469
		Engine backfiring	33	13,493
		Exposure	12	41,508
		Friction—		
		In brake drum	2	24,824
		In tires	3	5,711
		Gas, liquefied petroleum—		
		Explosion	1	500
		Improper use of or defective equipment	2	2,284
		Gasoline—		
		Broken line	24	45,124
		Carelessness with	3	2,678
		On exhaust-pipe	7	26,251
		Vapour explosion	1	128

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

Property		Causes		Amount of Loss	
Motor-vehicles—*Continued*		Heat radiation	2	$245	
		Hot ashes	2	315	
		Hot grease, ignition of	2	1,000	
		Incendiary	5	2,070	
		Inflammable vapours, ignition of	2	750	
		Matches—			
		Carelessness with	1	378	
		Children with	1	500	
		Motor-vehicle upset	5	40,525	
		Open flame	1	25	
		Oxy-gas welding or cutting equipment—			
		Defective	1	500	
		Improper use of	1	5,500	
		Sparks from	2	1,278	
		Short circuit	55	69,898	
		Smokers' carelessness	12	3,999	
		Sparks from bonfire	3	603	
		Thawing pipes	1	70	
		Unknown	38	60,261	
				$445,182	*$1,349,807
Mushroom-houses	1	Oil-burner, defective equipment	1		16,000
Offices	38	Defective wiring	2	$165	
		Electrical appliances	6	1,661	
		Exposure	3	1,780	
		Friction in machinery	1	58	
		Heat radiation	1	25	
		Hot grease, ignition of	1	150	
		Incendiary	3	1,001	
		Matches, children with	1	177	
		Oil-burner, defective	1	4,000	
		Short circuit	3	2,927	
		Smokers' carelessness	3	168	
		Unknown	13	196,119	
					208,231
Paper and pulp mills	2	Spontaneous ignition	1	$1,037	
		Steam-pipes insufficiently protected	1	200	
					1,237
Peat plants	1	Short circuit	1		1,150
Piggeries	2	Electrical appliances	1	$715	
		Unknown	1	635	
					1,350
Poolrooms	1	Oil-burner, defective	1		4,641
Post offices	1	Incendiary	1		10
Poultry houses	6	Incendiary	1	$800	
		Short circuit	1	471	
		Thawing pipes	1	13,750	
		Unknown	3	9,470	
					24,491
Power-houses	7	Defective wiring	1	$162,709	
		Hot oil, ignition of	1	5,093	
		Short circuit	2	5,559	
		Unknown	3	8,565	
					181,926
Printing plants	1	Incendiary	1		1,020
Pumps and pump-houses	7	Incendiary	1	$6,786	
		Matches, children with	1	435	
		Thawing pipes	2	950	
		Unknown	3	3,905	
					12,076
Radio stations	1	Matches, children with	1		25
Railroad rolling-stock	10	Exposure	1	$600	
		Gas, liquefied petroleum, explosion	1	170,000	
		Incendiary	3	22,375	
		Smoker's carelessness	1	5,150	
		Sparks from engine	1	3,000	
		Stove insufficiently protected	1	600	
		Unknown	2	550	
					202,275

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

Property		Causes		Amount of Loss	
Railroad roundhouses	1	Thawing pipes	1		$300
Railroad stations and properties	2	Unknown	2		14,005
Refineries (gasoline, natural gas, or oil)	3	Gasoline vapour explosion	1	$150,000	
		Hot oil, ignition of	1	1,000	
		Oil-burner, broken line	1	4,617	
					155,617
Refineries (sugar)	1	Oxy-gas welding or cutting equipment, sparks from	1		6,389
Restaurants	46	Candle carelessness	1	$2,147	
		Electrical appliances	2	467	
		Exposure	1	518	
		Furnace insufficiently protected	1	31,000	
		Gasoline stove	1	5,989	
		Hot ashes	1	10,532	
		Hot grease, ignition of	19	78,048	
		Incendiary	3	83,493	
		Oil-burner, defective equipment	1	400	
		Short circuit	1	8,658	
		Smokers' carelessness	4	8,296	
		Stove insufficiently protected	3	1,743	
		Unknown	8	97,594	
					328,885
Rinks (curling)	5	Short circuit	1	$200	
		Stove insufficiently protected	1	1,610	
		Unknown	3	505,286	
					507,096
Rinks (ice-skating)	2	Electrical equipment	1	$1,500	
		Gas, natural, improper installation of appliance	1	1,500	
					3,000
Rooming-houses	39	Chimney, defective	2	$3,585	
		Electrical appliances	2	11,186	
		Exposure	1	320	
		Furnace insufficiently protected	1	5,000	
		Gas, natural, improper installation of appliance	1	3,348	
		Gasoline carelessness	2	5,104	
		Hot grease, ignition of	3	1,273	
		Incendiary	1	50	
		Short circuit	1	200	
		Smokers' carelessness	21	16,044	
		Unknown	4	12,238	
					58,348
Sawmills	64	Boilers or boiler-pipes defective or overheated	4	$1,825	
		Electrical equipment	1	454	
		Exposure	1	15,601	
		Friction in conveyer belt	1	1,234	
		Gasoline carelessness	1	81	
		Lightning	1	20,000	
		Open flame	1	55,000	
		Oxy-gas welding or cutting equipment, sparks from	11	867,264	
		Short circuit	7	249,640	
		Smoker's carelessness	1	25	
		Sparks from grinder	1	125	
		Sparks from mill burner	16	146,742	
		Spontaneous ignition	1	155,162	
		Unknown	17	904,069	
					2,417,222
Schools	60	Candle carelessness	1	$1,055	
		Chemical explosion	2	2,000	
		Chimney, defective	1	28,253	
		Electrical appliances	5	6,715	
		Fireworks	1	500	
		Hot grease, ignition of	1	85	
		Incendiary	11	2,986	
		Inflammable vapours, ignition of	2	535	
		Matches—			
		Carelessness with	1	185	
		Children with	8	409	

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

Property		Causes		Amount of Loss	
		Oxy-gas welding or cutting equipment, sparks from	3	$26,608	
		Short circuit	3	837	
		Smokers' carelessness	10	718	
		Spontaneous ignition	3	1,220	
		Unknown	8	672,193	
					$744,299
Sheds	147	Chimney, defective	1	$750	
		Electrical appliances	3	3,612	
		Electrical wiring overloaded	1	1,393	
		Electro-welding equipment, sparks from	1	5,000	
		Exposure	3	1,835	
		Fireworks	1	193	
		Friction in pulley	1	198	
		Gas, liquefied petroleum, improper use of or defective equipment	1	500	
		Gasoline—			
		Carelessness with	2	3,100	
		Used to kindle fire	1	130	
		Vapour explosion	1	380	
		Heat radiation	1	356	
		Hot ashes	1	800	
		Hot grease, oil, tar, etc., ignition of	2	4,706	
		Incendiary	12	8,852	
		Kerosene carelessness	1	500	
		Matches—			
		Carelessness with	2	743	
		Children with	23	20,841	
		Oil-burners—			
		Defective	2	7,245	
		Explosion	1	1,000	
		Short circuit	4	6,091	
		Smokers' carelessness	10	4,442	
		Sparks from bonfire	5	3,025	
		Sparks from forge	1	706	
		Sparks from mill burner	3	6,936	
		Spontaneous ignition	3	1,642	
		Steam-pipes insufficiently protected	1	400	
		Stoves or stove-pipes—			
		Insufficiently protected	2	4,266	
		Sparks from	1	2,135	
		Unknown	56	75,130	
					166,907
Sheet-metal works	1	Unknown	1		31,224
Shingle-mills	9	Boiler, defective	1	$250	
		Exposure	1	350	
		Hot ashes	1	775	
		Oxy-gas welding or cutting equipment, defective	1	80	
		Smoker's carelessness	1	100	
		Sparks from mill burner	2	38,875	
		Unknown	2	46,791	
					87,221
Ships	5	Oil-burner, defective	1	$1,200	
		Oxy-gas welding or cutting equipment, sparks from	1	2,000	
		Smoker's carelessness	1	1,000	
		Sulphur, ignition of	1	320	
		Unknown	1	20	
					4,540
Shipyards	1	Unknown	1		150
Ski-lifts	1	Oxy-gas welding or cutting equipment, sparks from	1		138,578
Smelting plants	25	Electrical equipment	1	$15	
		Friction—			
		In conveyer belt	1	300	
		In machinery	2	525	
		Furnace insufficiently protected	2	350	
		Gas, liquefied petroleum, improper installation of appliance	1	100	

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

Property		Causes		Amount of Loss	
		Gas, natural, improper installation of appliance	1	$50	
		Heat radiation	2	125	
		Inflammable vapours, ignition of	1	100	
		Molten metal	1	200	
		Oil-burners—			
		Explosion	1	400	
		Sparks from	1	50	
		Oxy-gas welding or cutting equipment, sparks from	1	200	
		Short circuit	6	1,275	
		Spontaneous ignition	1	500	
		Thawing pipes	1	200	
		Unknown	2	9,918	
					$14,308
Smoke-houses	3	Hot grease, ignition of	1	$60	
		Sparks from bonfire	1	50	
		Unknown	1	250	
					360
Steam baths	1	Chimney, defective	1		3,000
Steel-fabricating plants	4	Molten metal	1	$2,831	
		Oxy-gas welding or cutting equipment, sparks from	2	147	
		Unknown	1	9,815	
					12,793
Stone works	2	Furnace insufficiently protected	1	$3,000	
		Sparks from bonfire	1	25	
					3,025
Stores	138	Chimney, defective	1	$192	
		Defective wiring	2	9,504	
		Electrical appliances	12	77,809	
		Exposure	14	368,486	
		Fireworks	2	2,055	
		Furnaces or furnace-pipes—			
		Combustible materials too near	1	125	
		Defective	1	100	
		Gas, liquefied petroleum, improper use of or defective equipment	1	126,962	
		Gasoline carelessness	1	1,286	
		Heat radiation	1	58	
		Hot grease, ignition of	1	342	
		Incendiary	11	40,940	
		Inflammable vapours, ignition of	1	275	
		Matches, children with	5	5,735	
		Oil-burners—			
		Defective	4	28,323	
		Defective equipment	1	1,941	
		Short circuit	4	40,760	
		Smokers' carelessness	43	30,561	
		Sparks from bonfire	3	5,020	
		Stoves or stove-pipes—			
		Combustible materials too near	1	170	
		Defective	1	13,090	
		Unknown	27	461,130	
					1,214,864
Stores and apartments	34	Children playing with fire	1	$415	
		Exposure	2	873	
		Gas, liquefied petroleum, improper use of or defective equipment	1	368	
		Gas, natural, improper use of or defective equipment	1	5,473	
		Gasoline—			
		Carelessness with	1	6,236	
		Vapour explosion	1	9,285	
		Hot grease, ignition of	1	125	
		Incendiary	2	75	
		Matches, children with	2	18,870	
		Smokers' carelessness	16	18,451	
		Stove, combustible materials too near	2	150	
		Unknown	4	5,164	
					65,485

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

Property		Causes		Amount of Loss	
Stores and dwellings	12	Candle carelessness	1	$663	
		Electrical appliances	3	47,695	
		Furnace, defective	1	2,593	
		Matches, children with	1	400	
		Short circuit	1	9,877	
		Stove insufficiently protected	1	4,000	
		Unknown	4	83,515	
					$148,743
Stores and offices	3	Short circuit	1	$164	
		Smokers' carelessness	1	20	
		Unknown	1	25	
					209
Stores and rooms	8	Incendiary	3	$185	
		Smokers' carelessness	4	244	
		Stove, combustible materials too near	1	50	
					479
Swimming-pools	2	Exposure	1	$1,000	
		Short circuit	1	125	
					1,125
Tar pots	2	Hot tar, ignition of	1	$1,000	
		Unknown	1	38	
					1,038
Tents	5	Gas, liquefied petroleum, improper use of or defective equipment	1	$809	
		Gasoline lamp	2	275	
		Sparks from bonfire	2	530	
					1,614
Theatres	5	Electrical appliances	1	$4,305	
		Incendiary	1	10	
		Matches, children with	1	50	
		Short circuit	1	135	
		Spontaneous ignition	1	32,797	
					37,297
Trailers (mobile homes)	98	Defective wiring	1	$1,100	
		Electrical appliances	1	141	
		Exposure	3	2,400	
		Friction in tires	1	5,095	
		Furnace, combustible materials too near	4	11,086	
		Gas, liquefied petroleum—			
		Explosion	3	11,036	
		Improper use of or defective equipment	5	62,263	
		Gasoline used to kindle fire	1	435	
		Hot grease, oil, tar, etc., ignition of	5	5,237	
		Incendiary	1	100	
		Inflammable vapours, ignition of	1	2,000	
		Matches, children with	4	12,643	
		Oil-burners—			
		Defective	15	84,259	
		Defective equipment	3	3,025	
		Explosion	5	20,640	
		Sparks from	1	10,000	
		Short circuit	7	27,990	
		Smokers' carelessness	12	13,118	
		Stoves or stove-pipes—			
		Combustible materials too near	1	5,757	
		Defective	1	7,525	
		Insufficiently protected	1	2,077	
		Thawing pipes	5	27,416	
		Unknown	17	65,725	
					381,068
Trailers (travel)	9	Exposure	1	$150	
		Friction in tires	1	267	
		Furnace, combustible materials too near	1	287	
		Gas, liquefied petroleum, improper use of or defective equipment	1	700	
		Gasoline carelessness	1	1,400	
		Incendiary	1	10	
		Smoker's carelessness	1	756	
		Sparks from bonfire	1	125	
		Unknown	1	2,600	
					6,295

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

Property		Causes		Amount of Loss	
Trash barrels	11	Incendiary	1	$15	
		Matches, children with	2	40	
		Smokers' carelessness	4	310	
		Unknown	4	230	
					$595
Tugboats	8	Engine backfiring	1	$13,000	
		Gasoline—			
		Broken line	1	50,000	
		Carelessness with	1	1,000	
		Hot grease, ignition of	1	100	
		Short circuit	2	45,209	
		Stove insufficiently protected	1	9,750	
		Unknown	1	50	
					119,109
Warehouses	39	Electrical appliances	2	$2,786	
		Exposure	5	146,940	
		Furnace, defective	1	45,367	
		Incendiary	2	53,933	
		Matches, children with	5	15,089	
		Oil-burners—			
		Defective	1	10,000	
		Defective equipment	1	150	
		Explosion	1	2,019	
		Oxy-gas welding or cutting equipment—			
		Defective	1	447	
		Sparks from	3	3,500	
		Short circuit	1	440,000	
		Smokers' carelessness	3	57,826	
		Thawing pipes	2	423	
		Unknown	11	1,002,321	
					1,780,801
Welding-shops	1	Defective wiring	1		142
Wharves	3	Exposure	1	$300	
		Friction in tires	1	50	
		Smoker's carelessness	1	10	
					360
Woodworking plants	7	Defective wiring	1	$40,801	
		Friction in machinery	1	24,084	
		Gasoline carelessness	1	200	
		Incendiary	1	25	
		Smokers' carelessness	2	2,230	
		Unknown	1	5,706	
					73,046
Workshops	14	Gasoline-vapour explosion	1	$70	
		Matches—			
		Carelessness with	1	13,796	
		Children with	1	1,400	
		Oil-burner, defective equipment	1	433	
		Oxy-gas welding or cutting equipment, sparks from	1	1,085	
		Short circuit	1	898	
		Smoker's carelessness	1	2,000	
		Spontaneous ignition	1	25	
		Stove insufficiently protected	2	8,500	
		Thawing pipes	1	2,000	
		Unknown	3	3,543	
					33,750
Totals	7,010		7,010		$21,116,971

TABLE VI.—SUMMARY

Fires Reported

	City Municipalities (31)	District Municipalities (39)	Town Municipalities (13)	Village Municipalities (57)	Fire Districts (17)	Totals
1968						
January	242	175	24	19	131	591
February	231	180	8	14	91	524
March	224	181	18	15	100	538
April	278	193	18	7	107	603
May	276	176	15	25	98	590
June	250	211	8	7	99	575
July	258	209	13	9	98	587
August	232	145	9	22	110	518
September	223	166	14	12	78	493
October	276	196	11	13	96	592
November	242	181	14	19	116	572
December	349	288	21	16	153	827
Totals	3,081	2,301	173	178	1,277	7,010

Amount of Loss

1968						
January	$685,993	$969,018	$16,556	$38,219	$747,513	$2,457,299
February	324,658	469,735	7,163	17,826	326,845	1,146,227
March	323,661	345,222	12,881	252,889	541,679	1,476,332
April	1,273,594	358,488	71,260	64,623	520,542	2,288,507
May	770,942	210,861	283,228	276,049	1,208,403	2,749,483
June	283,105	359,849	7,626	14,925	364,819	1,030,324
July	234,527	304,409	19,097	20,736	518,387	1,097,156
August	397,449	135,930	3,293	41,070	882,981	1,460,723
September	431,223	225,975	12,280	69,432	394,373	1,133,283
October	822,253	352,493	64,825	95,688	298,782	1,634,041
November	482,875	263,270	199,849	175,302	1,021,092	2,142,388
December	868,813	301,026	65,764	388,715	876,890	2,501,208
Totals	$6,899,093	$4,296,276	$763,822	$1,455,474	$7,702,306	$21,116,971

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

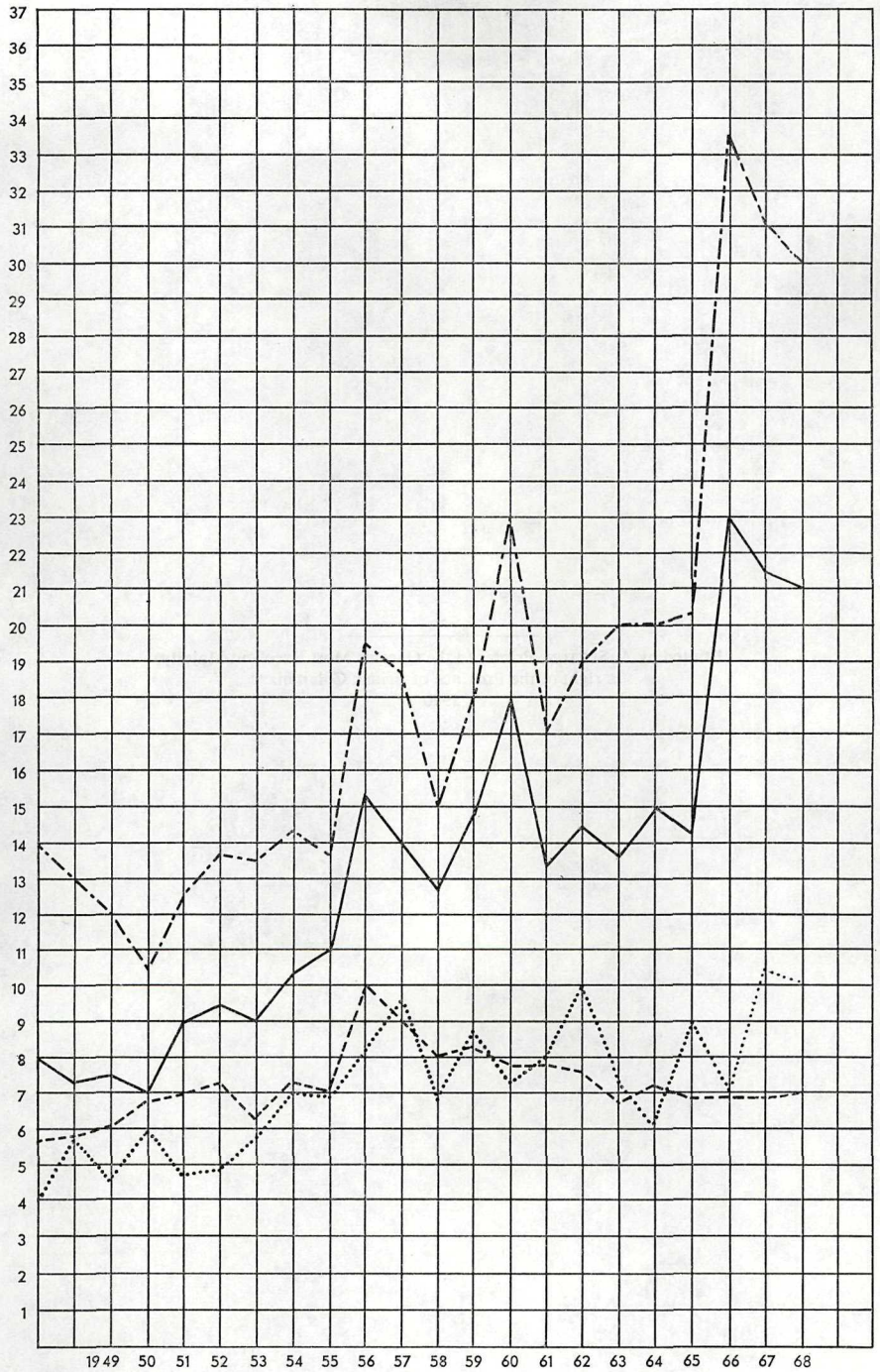
Year	City Municipalities		District Municipalities		Town Municipalities	
	Fires	Losses	Fires	Losses	Fires	Losses
1968	3,081	$6,899,093	2,301	$4,296,276	173	$763,822
1967	3,264	7,327,896	2,129	5,307,350	154	558,875
1966	3,350	10,340,128	2,026	3,173,114	144	554,895
1965	3,351	4,756,985	2,080	2,855,954	109	342,522
1964	3,366	4,204,463	2,166	3,325,408	71	242,674
1963	3,233	4,343,193	2,113	3,214,837	61	339,654
1962	3,570	3,966,380	2,270	2,275,737	79	61,020
1961	3,788	5,775,054	2,386	2,312,942	74	91,151
1960	3,823	8,177,601	2,324	3,319,569	51	124,547
1959	4,097	5,361,352	2,487	3,026,143	45	187,388
Totals	34,923	$61,152,145	22,282	$33,107,330	961	$3,266,548

Year	Village Municipalities		Fire Districts		Totals	
	Fires	Losses	Fires	Losses	Fires	Losses
1968	178	$1,455,474	1,277	$7,702,306	7,010	$21,116,971
1967	161	1,619,445	1,226	6,676,487	6,934	21,490,053
1966	187	912,541	1,196	8,164,901	6,903	23,145,579
1965	184	878,033	1,253	5,304,290	6,977	14,137,784
1964	245	830,912	1,270	6,382,406	7,118	14,985,863
1963	246	634,304	1,262	5,260,743	6,915	13,792,731
1962	261	720,592	1,432	7,323,141	7,612	14,346,870
1961	292	816,261	1,309	4,499,526	7,849	13,494,934
1960	301	382,782	1,323	6,285,884	7,822	18,290,383
1959	350	1,045,840	1,289	5,238,829	8,268	14,859,552
Totals	2,405	$9,296,184	12,837	$62,838,513	73,408	$169,660,720

TABLE VIII.—LOSS OF LIFE, 1959–1968

Occupancy	Number of Fires	Causes of Fires	Loss of Life			
			Men	Women	Children	Total
Apartments	11	Matches, Children with (1)	----	----	1	1
		Smokers' carelessness (8)—				
		In bed (2)	----	2	----	2
		In the home (1)	----	----	1	1
		While intoxicated (5)	2	2	1	5
		Unknown (2)	2	1	2	5
Barns	1	Matches, children with (1)	----	----	1	1
Barracks	1	Smoker's carelessness (1)	1	----	----	1
Bunkhouses	1	Smoking in bed (1)	1	----	----	1
Dwellings	47	Chimney, defective (2)	1	1	2	4
		Defective wiring (2)	----	----	3	3
		Gasoline used to kindle fire (1)	1	----	----	1
		Incendiary (1)	----	----	1	1
		Inflammable vapours, ignition of (1)	----	1	1	2
		Matches, children with (3)	1	1	3	5
		Oil-burner, defective (1)	1	----	----	1
		Smokers' carelessness (25)—				
		In bed (12)	4	9	----	13
		In the home (7)	5	2	2	9
		While intoxicated (6)	4	1	1	6
		Stoves or stove-pipes (5)—				
		Combustible materials too near (2)	----	2	----	2
		Insufficiently protected (1)	1	----	----	1
		Sparks from (2)	1	----	1	2
		Unknown (6)	4	2	----	6
Fishing-boats	4	Gasoline (2)—				
		Carelessness with (1)	----	----	1	1
		Stove (1)	1	----	----	1
		Smoker's carelessness (1)	1	----	----	1
		Stove, combustible materials too near (1)	1	----	----	1
Hospitals	2	Smoking in bed (2)	2	----	----	2
Hotels	3	Smoking in bed (1)	5	----	----	5
		Stove, combustible materials too near (1)	1	----	----	1
		Unknown (1)	3	1	----	4
Motor courts	1	Smoking while intoxicated (1)	1	----	----	1
Outdoors	2	Gasoline carelessness (1)	1	----	----	1
		Matches, children with (1)	----	----	1	1
Rooming-houses	3	Electrical appliances (1)	1	----	----	1
		Furnace-pipe insufficiently protected (1)	----	1	----	1
		Smoker's carelessness (1)	1	----	----	1
Schools	1	Smoking in bed (1)	----	1	----	1
Tents	2	Gasoline lamp (2)	----	----	2	2
Trailers (mobile homes)	1	Furnace, combustible materials too near (1)	1	----	----	1
Workshops	1	Thawing pipes (1)	1	----	----	1
Totals, 1968	81		49	27	24	100
Totals, 1967	78		46	25	35	106
Totals, 1966	58		39	13	18	70
Totals, 1965	71		46	17	28	91
Totals, 1964	51		28	9	24	61
Totals, 1963	54		35	15	23	73
Totals, 1962	69		47	13	38	98
Totals, 1961	60		33	19	27	79
Totals, 1960	56		38	14	19	71
Totals, 1959	63		47	9	30	86
Ten-year totals			408	161	266	835

TABLE IX.—TWENTY-YEAR FIRE LOSS



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