

American Guide Series

FIRE PREVENTION IN PORTLAND
(1914 to 1938)

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FIRE PREVENTION IN PORTLAND

It's Not Thursday

On a September morning in 1914 the fire alarm bell in the Lincoln High School of Portland clanged peremptorily. A few of the pupils looked up inquiringly from their books for a moment, then, unconcerned, returned to their studies. Fires, or fire drills, they knew, did not occur except on designated occasions; the alarm apparatus must have become short-circuited. The principal, however, was more disturbed than the pupils. Inquiring for the cause of the disturbance, he was met by a visiting deputation sent out by the city's newly-formed Safety First Committee. These interested citizens, surprised and chagrined by the result of their experiment, were told that if they returned on Thursday, the regular fire drill day, they might witness an orderly and well conducted exercise. Battalion Chief Jay W. Stevens of the Portland Fire Department then asked what assurance there would be that a fire would pick Thursday for a visit. The principal acknowledged that the point was well taken and invited Chief Stevens to return the following week and address the student body on "safety first" as it related to fires (3 & 9).

Thus the beginning of the first fire prevention campaign in the history of the city emphasized its need. Prior to that September morning fire prevention had been merely a catch phrase coined to coerce compliance with fire regulations. The indifference of the citizens of Portland, in the light of present knowledge, to the need of strict fire regulations and of constant alertness to the dangers of conflagration, is surprising. Upon visiting a factory where a number of women were employed, a fire marshal learned that but two of them knew where the fire escapes were located. The owners of old and highly combustible buildings were reluctant to remove them and thus lessen the fire hazard. Coming as it did, after a three-year period during which the fire losses had been swiftly mounting, this attitude indicates the apathy of Portlanders to the genuine menace. From the increasing number of false alarms turned in each year, it would seem that the chief sport of many persons was watching the harassed firemen careen down the narrow, congested streets.

A picture of Portland, a city of over 300,000 population, is perhaps necessary to visualize completely the difficulties encountered by the fire department. The older portion of the city, west of the Willamette River, occupies a comparatively narrow strip of bench-land along the water's edge, backed by a spur of high hills. These hills are segmented by numerous winding drives and streets leading to abrupt slopes and dead ends. The constricted business area is made doubly hazardous to traffic and fire because the promoters of the town site did not bother to introduce alleys. Also, due to the restricted area and the heavy growths of timber on the original site of the city, the streets as laid out are narrow and offer definite obstacles to the quick movement of modern fire-fighting equipment. In the early days of complaint that stumps in the street were menaces to nocturnal travel led to the white-washing of the stumps as a measure of safety. Derisively the other towns up and down the river referred to the future metropolis as

“Little Stump Town.” The stumps have long been removed and the streets paved but the narrowness remains.

As losses by fire steadily mounted it became apparent to many thoughtful citizens that perhaps it was more economical to prevent fires than to put them out after they had started. These men, noting the increasing gravity of the situation, came to the conclusion that most fires were preventable if sufficient precautions were taken. From their activities grew the movement that has lifted Portland from one of the nation’s worst fire risks to one of its best.

The Oregon Civic League and the Portland Association of Credit Men pioneered this fire prevention campaign (2 & 3). In 1912 the latter organization formed a Fire Prevention Committee, headed by E.M. Underwood. Lectures, illustrated by a few of the city’s choicest fire hazards, were delivered to mildly interested audiences. Needless to say, the committee did not have far to look for fire hazards as they were on all sides. Previous to that time little had been done to educate the public or convince architects and builders in the proper preventive measures to be taken in constructing public buildings. Lumber had always been plentiful and cheap and there was an abundance of frame buildings, many of them past their usefulness but still standing, dry as tinder. And to add to the menace was the riverfront with its miles of wooden docks and warehouses.

Parades and Programs

In April, 1914, Fire Chief B.F. Dowell recommended the establishment of a Fire Prevention Division in the Portland Fire Department. (4). On the 18th of that month, the anniversary of the \$500,000,000 San Francisco fire of 1906 (5) Portland and Oregon observed the first fire prevention day in the history of the state. A parade through the downtown streets, a large part of the fire department participating, marked the beginning of the day’s program. Strung along the fire trucks were banners bearing such admonitions as: “Is your hotel, factory, warehouse or home a fire trap? Some day it may claim your employees, your guests or us as victims” and “Fire loss is irretrievable waste. Never a dollar returns. Insurance only distributes it to your neighbors.” The Oregon Civic League sponsored a Fire Prevention luncheon at which Chief Dowell declared there was “too much money spent putting out fires and too little preventing them.” The program for the day concluded with a lecture by Mr. Underwood, at the East Side Library. He told his audience that Portland fires were fifty percent preventable, urged that all stairways in large buildings be enclosed with fire-proof material, and declared the water front to be the worst fire risk in the United States (6).

During the summer the Portland Electric and Power Company became concerned over the number of accidents and lives lost among the patrons of their street car lines. In an endeavor to educate people not to walk from behind street cars into the path of other on-coming cars, not to walk in front or jump off moving cars, and not to take other foolhardy chances (3), a “safety first” campaign was inaugurated under the leadership of B. F. Boynton, an associate of the company.

Other civic organizations became interested in this movement. In September leading citizens of Portland formed a Safety First Committee, headed by Harry P. Coffin (7). Particularly did their interest extend to the safety of children on the streets and in the schools. The adequacy of school fire drills was questioned and as a test the members of the Portland Fire Department turned in the alarm which was ignored at Lincoln High School. In an address to the students by Chief Stevens a few days later he asked "Where is the fire-alarm box nearest to your house?" and "How many know the telephone number of the fire department?" Scarcely a dozen pupils could answer affirmatively. Chief Stevens pointed out that it was definitely a matter of safety and good citizenship to know these things. He also emphasized the need of an orderly and speedy response to every fire-alarm and explained the best conduct in the event of a fire. The talks were repeated at the other Portland high schools (10 & 12) and later extended to the grammar schools. During the winter the school children became familiar with the working of the fire bureau and were given instructions which, if followed, would lessen the danger of fire. They were told how to turn in a fire alarm, and warned of the cost and danger of false alarms.

The Nation's Worst Fire Risk

Fires, however, continued unabated and at the end of 1914 the year's loss was sixteen lives (16) and \$1,762,493.46 in property, which in monetary loss was an advance of \$758,855.21 over the 1913 record (1). This placed Portland in the ignominious position of being among the nation's worst fire risks. Fire insurance companies were threatening a twenty-five per cent increase in insurance rates unless the city did something to decrease the fire danger (3). Citizens began asking each other what was wrong with the Portland Fire Department that this should happen? At a meeting of the Portland Chamber of Commerce, called for the expressed purpose of thoroughly considering the fire situation, and attended by Chiefs Dowell and Stevens, the letter declared all were at fault in allowing such conditions to exist. A conference with Mayor H. B. Albee followed this meeting, with the result that the Mayor appointed Stevens Fire Marshal and placed him in charge of the city's fire prevention work (11 & 3).

In order that he might learn all about methods in fire prevention and protection (12), the newly appointed Fire Marshal was sent to visit fire departments in several of the larger cities (13). His itinerary included a dozen cities, where he not only visited the offices of the chiefs but stayed at the fire stations, responded to alarms and studied methods of dealing with fire. In all this wide field, he did not find an established fire prevention plan except in Chicago, which had a program of building inspections by members of the fire department. However, Fire Marshal Stevens knew that his home town needed a more forceful course of action and immediately upon returning he launched a twenty-four hour day fire prevention program.

Only Uniformed Men

When asked whom he wanted to assist in the work, Fire Marshal Stevens replied, "Only uniformed men already in the service." Captains and lieutenants of the fire companies were appointed deputy fire marshals (14). The first meeting of the Fire Prevention

Division was held March 19, 1915, when initial plans were laid for the campaign (15). The first step was inspection of all theaters. It had been discovered that, should the seating capacity of a house be filled, patrons were allowed to crowd the aisles: that fire exits were not marked, and were often found to be blocked by discarded signs, packing boxes and other debris. An even greater risk was careless smoking back stage, amid thousands of feet of inflammable scenery, with nothing to separate the stage from the spectators except the so-called asbestos curtain which the fire marshal declared to be "not worth thirty cents." (16 & 21)

Inspection of all garages, public and private, followed and places where oil was stored, the intentions being to compel owners to comply with restrictions as to building arrangements and to prohibit smoking at all times in such places (17 & 18). A check was made on the amounts of gasoline stored, the containers, and the manner of storage (19).

A city-wide building inspection program was outlined. Portland was divided into districts, with deputy fire marshals assigned to each and a thorough inspection was planned for all buildings within the territory: every six months for residential districts, schools every month, and down town buildings as often as it seemed necessary. This work was carried on by the deputy fire marshals when they were not needed for other duties pertaining to the positions. They received no extra compensation (15, 20 & 22).

A school for fire marshals was organized with classes twice a week. Cause of fire and methods of prevention were studied. Lectures were given by experts in the handling of gasoline and combustibles, by experienced builders and masons, skilled electricians, and authorities on arson so that the men might become thoroughly familiar with what constituted fire hazards and informed as to how they could be eliminated (21 & 22).

School Children Appointed Assistant Marshals

Talks to school children on fire prevention were resumed. Realizing the influence of the average child in his home, Fire Marshal Stevens appointed as assistant fire marshal every boy and girl he was addressing (21, 22 & a4).

"When you go home tonight as assistant fire marshals," he told them, "make a careful inspection. See if wood and other burnable material is piled around the furnace. See if there is moss on the roof, or if father throws the butt of his cigar in the wastepaper basket." In the main the children took these appointments seriously and became an educational force towards fire prevention in city homes.

The children were repeatedly warned against the temptation of turning in false alarms. Notices of arrest--with penalty of a fine, or imprisonment, or both -- in the event of a proven false alarm, were posted at all alarm boxes. This effectually curbed this nuisance (11 & 14).

Attention was concentrated upon fire drills in department stores, factories, institutions and schools. It was found that this work was much needed (23 & 24). In the summer it

was urged that moss be cleaned off the roofs and an ordinance was passed to insure compliance with this request. Fire Marshal Stevens had warnings against the danger of fire to meet every occasion (25). Because several Portland children were burned to death as the result of playing with matches, he urged the use of safety matches. Deputy fire marshals, when on inspection tours, were instructed to remind each household of this danger (3 & 26).

Civic groups and leaders lent their cooperation to Portland's new Fire Prevention Bureau and did much towards advancing its program (2 & 3). Mayor Albee and Fire Chief Dowell unstintingly gave support to the Fire Marshal's plans. The press fell into line publicizing the program. Especially generous in this behalf was B. F. Irvine, editor of the Oregon Daily Journal, June 17, 1915, tells the story.

"Since 6 o'clock Sunday night there has not been a fire or a fire alarm in Portland. This is the longest period since Portland's fire bureau became a full fledged department that no alarms have been received. It is believed that this establishes a new no-fire record for cities of Portland's size.

"This means there has not been a fire of any kind reported in Portland in the last ninety hours and the fire equipment has been idle. Up to this time there have been from one to twenty-four alarms a day and as many as 295 in one month.

"It is believed that this record is the result of the Fire Prevention Bureau, headed by Fire Marshal Stevens."

Anniversary of Mrs. O'Leary's Cow.

President Wilson set aside the month of October, 1915, to be observed nationally as fire prevention day (27). Appropriately enough this was the anniversary of Chicago's famous 1871 fire, which burned over an area of three and one third square miles and handed down the fame of Mrs. O'Leary's cow for generations (5).

Portland's Fire Prevention Division worked out an intensive program for the week preceding the appointed day. Lectures were sponsored by civic groups. The efficiency of fire drill was tested in department stores and factories. Interest was enlivened by a fire drill contest among the schools, Ockley Green winning in the grade school division when their 700 pupils vacated the building in 57 seconds. Honors among the high schools went to Jefferson, their building being cleared of 1500 students in one minute and seven seconds. (3 & 27).

Fire prevention data was included in the school work and in recitations of every Portland school child above the fourth grade for the week before October ninth (3 & 24). Following is a questionnaire given to each pupil.

- Has your chimney been cleaned this year?
- Has your home been inspected by the fire marshal?

- Do you keep ashes in a metal can?
- Do you use safety matches? If not, are they kept out of the reach of children?
- Is your basement free from rubbish?
- Is your gasoline kept inside the house?
- Has the moss been removed from your roof?
- Has the winter's wood been piled too close to the furnace?
- Name the ten most common causes of fire in the home and school.

The culmination of the week's drive to impress Portland with the need of taking every possible step towards elimination of fire risks was a parade in the morning of Fire Prevention Day. Governor Withycombe, Mayor Albee, city commissioners, civic groups, school children, county officials, firemen, police, the United States Forestry Service and other interested organizations took part.

The Chamber of Commerce sponsored a luncheon honoring Fire Marshal Stevens and his deputies, and lauded the progress they had made in cutting down fire losses in Portland (3 & 28).

Henchmen of Safety

Every man, woman and child, however, did not participate in all the plans for fire prevention. A fire marshal frequently had the door slammed in his face by an impatient housewife. He was often told to "get out" by an irate property owner when he suggested an improvement which should be made to lessen the danger of fire. All too frequently he was denied admission to a building when he arrived on an inspection tour (3 & 28).

On one occasion a citizen, angry because he had been notified to remove the moss from the roof of his home, telephoned Fire Marshal Stevens. "One of your henchmen is out here inspecting my house," he reported, "and I warn you, there will be an election before long and you will not get my support." Happily the Fire Marshal and all his "henchmen" were working under civil service (22).

Perhaps the unkindest out of all was given by a leading Portland newspaper which facetiously referred to the fire marshals as "match inspectors." When rebuked by the opposition press for this flippant attitude the offending newspaper rushed editorially to its own defense with "a reference to a city official, whose duty it is to caution busy mothers against letting their children play with matches." The editorial commented further, "the impression seems to prevail that mothers are not good for much nowadays" so the "city now gives lessons in safety." Carried on by the force of this logic the suggestion was made for "wash tub inspectors" and "why not inspectors of galoshes?" A smashing conclusion asserted: "The average mother, conscious of her common sense, resents admonitions just as thoroughly as would the father if a uniformed officer called at his office and cautioned him against smoking in bed. No one enjoys the implication that one is a fool." (3, 29 & 30)

Better than the Ponies

The most startling revelation of the fire prevention program was brought about through the work of the "arson squad" (3, 21, 27, 31, 32, 33 & 34). Fire Marshal Stevens appointed Fire Captains W. A. Groce and Fred W. Roberts and Lieutenant E. J. Treese to this work. These men attended every Portland fire, often arriving upon the scene before the companies. As soon as possible they began inspection and continued until the cause of the fire was established beyond any reasonable doubt. Their untiring and vigilant efforts and the able and willing assistance of District Attorney Walter H. Evans and his deputies, uncovered two arson rings operating in Portland.

About twenty persons were involved in one ring. It had operated profitably up and down the Pacific coast -- but chiefly in Portland -- since 1910. The arsonists had developed their profession to a science. They built houses or remodeled them so they would burn easily and quickly. Metal parts of furniture planted in rooms were to be found later in the ashes. Building sites were chosen with reference to their distance from hydrants and fire stations, combustibles were artfully arranged to give the right "flash" and alibis were prepared in advance. Profits were large and the sporting chance a great attraction. As one of the accused said: "The insurance companies bet me a \$1,000 against \$14 that I can't burn a house and gives me three years to do it. It's a better game than "the ponies." However, the combined efforts of the arson squad and District Attorney Evans shattered the game in eight months time. Thirty-five arrests resulted in twenty-four convictions. Considering that arson is one of the most difficult criminal cases to prove this record is remarkable.

The Mysterious Mr. Dobler

From the beginning of the fire prevention campaign Fire Marshal Stevens had maintained that fire insurance was issued too freely in Portland and the arsonists seemed to bear out his contention. He had repeatedly urged agents to cooperate with the Fire Prevention Bureau in this matter as a means of making arson less attractive, and argued that the fire risk in Portland was increased by over-insurance and negligible inspections before policies were granted. As a test of cooperation in this matter, in January, 1916, members of the fire department began to take out fire insurance policies. The "furnishings" of a house, which investigation would have revealed empty save for a fireman's helmet, a tin cup and a grand jury summons, were insured for amounts ranging from \$400 to \$600. Policies amounting to \$20,000 were secured on another house with like "furnishings." Policies were obtained on the "contents" of a building which six months before had been burned by arsonists, in a fire which had attracted considerable attention at the time. Insurance was written on a non-existent house at an address that would have led an investigator to a vacant lot. Although the building had been unoccupied for weeks, the fittings of a saloon, in the center of the business district, were insured. Although every fire insurance agent in Portland was visited, only a few actually investigated the risks or turned down applications. For the most part the firemen used their own names when applying for policies. A few used fictitious names. Fire Captain Groce obtained close to twenty policies for a mythical Charles Dobler. It was the mythical Mr. Dobler, himself,

who finally revealed the fire department's strategy. One insurance agent visiting the office of another agent heard the name mentioned.

“Charles Dobler, are you writing a policy for him?”

“Sure,” answered the other agent.

“Well, I wrote one for his wife a week ago!”

A rapid check revealed that these two as well as about thirty-five other agents, had been trapped by the fire department's scheme. Agents made frantic efforts to recall policies, to cancel them, or to stop deliveries. The Fire Prevention Bureau, however, possessed some sixty-five policies. After a conference with State Insurance Commissioner Harvey Wells, the Bureau agreed to return the policies to the agents with a rebuke, a warning to change their business methods, and a suggestion that thereafter they cooperate to the fullest extent with the Fire Marshal (3, 14, 35, 36 & 37).

The Fire Prevention Bureau's intensive campaign against fire for nine months in 1915 showed a remarkable improvement over the 1914 record:

- Total fire loss, 1914 \$1,762,493.46
- Total fire loss, 1915 \$1,289,372.76 (1)

During 1914 there were eight days, each without a single alarm. In 1915 there were 36 days with no alarms (a2).

Following are the direct results of the 1915 anti-false alarm campaign as compared with the 1914 record.

- January to June, 1914 75 false alarms
- July to December, 1914 98 false alarms
- January to June, 1915 15 false alarms
- July to December, 1915 6 false alarms

The number of fire alarms for 1915 totaled 1,053 which was appreciable lower than the 1914 record of 1,930 alarms. There was also a reduction of 33% in the number of fires entailing losses.

Perhaps the most striking example of combined public spirit, enthusiasm, and cooperation which Portland has ever experienced was displayed in the “Clean-up and Paint-up” drive May 1 to 15, 1916. The Civic Bureau of the Chamber of Commerce, originators of the plan, were joined by civic and neighborhood groups, Mayor Albee, the fire bureau, the city street cleaning department, and practically every man, woman, and child, in a mass effort to clean up the city. Early in April details of organization were carefully outlined so that when the actual clean-up days arrived the campaign was carried thru successfully (3, 38, 39 & 40).

Over the Top Against Flame

The war in Europe was in its second year and all United States was becoming military-minded. Planning the project as a military campaign held popular appeal. Jacob Kanzler, at the time secretary of the Civic Bureau, was appointed field marshal of Portland's clean-up forces. The city was divided into twelve districts, with a clean-up day allotted to each. Prominent citizens from each district served as captains or lieutenants who enlisted all their neighbors into the clean-up army.

Three days before the attack was to be centered upon a district, a "flying squadron" of firemen conducted a house-to-house canvass, stirring up public interest and distributing handbills with working plans for the drive as follows:

A thorough Clean-up and Paint-up campaign carried out in each district will accomplish the following results.

1. Will make Portland the cleanest city in the United States.
2. Will make Portland the most healthful city in the world.
3. Will multiply Portland's natural beauty.
4. Will greatly increase safety of life and property from fire.
5. Will make Portland ready to entertain the many visitors who are coming to see our Rose Festival, Columbia River Highway and the many wonders of the great Northwest.
6. Will influence every man, woman and child to keep Portland clean during the entire year.

Some of the clean-up suggestions were:

- a) Clean-up and paint-up your promises first -- from cellar to garret -- now.
- b) Remove or bury all rubbish which cannot be burned or sold on your district clean-up day.
- c) Plant roses, shrubs and flowers.
- d) Keep grass cut and lawn trimmed.
- e) Vacant lots should be cleaned and rubbish burned.
- f) Plow and plant potatoes wherever possible.
- g) Rubbish which cannot be burned will be removed by the city.
- h) Pile non-burnable rubbish along the curbs of hard-surfaced streets only, as five-ton trucks cannot operate on wet dirt streets.
- i) Make rubbish heaps as large as possible on the curbs.
- j) Lieutenants will please report the immediate street location of all rubbish heaps to their district captains.
- k) Captains should promptly report all rubbish heaps to Field Marshal Kanzler.

The flying squadron checked over every foot of the territory, making note of unsatisfactory conditions, and turned their findings over to district captains, who were concentrating the attack of their forces upon these specific points.

The clean-up invasion hit the city at its most northern frontier on the morning of May 1, and began moving southward, conquering new territory each day, until it had swept the entire East Side. Then crossing the river the drive circled back to the north, ending victoriously with Harbor Day on May the fifteenth.

Before the allotted clean-up day district captains “Paul Revered” through their territories, marshaling their recruits and making plans for daybreak attack. Bright and early the companies assembled on the outer border of their districts and the battle began. Schools were dismissed so children might join. All day the smoke of bonfires curled skyward while the deadly charge on disorder, dirt and disease advanced. Forces met at noon at the most centrally located fire station where a luncheon was served by the women of the district and plans and progress of the drive were discussed. By nightfall huge piles of non-burnable rubbish were heaped along the curbs to be removed two days later (and in many cases weeks later) by the city street cleaning department.

Profits in Precaution

Children became doubly interested in the drive when Timms, Cress and Company of Portland agreed to buy bright tin cans. They planned to melt them, using the metal for sash weights and the like. Tons of cans reached the factory by way of the fire stations that served as market points.

The actual results of this city-wide clean-up campaign compiled from written reports of the district captains by Field Marshal Kanzler were: 8,342 (50 x 100) lots cleaned; 1,231 lots planted; 389 houses painted as a direct result of the drive; 113 shacks removed; 754 neglected premises improved; 459 lesser nuisances abated; 131 large unsightly places cleaned; 43,031 pounds of tin cans bought by Timms, Cress and Company from the children for \$86.74; the boys and girls also received \$743.46 from the sale of other junk; 396 five-ton truck loads, or 3,133 yards of non-burnable rubbish removed by the street cleaning department and thousands of yards of rubbish burned of which no record could be kept (41).

The success of the “Clean-up and Paint-up” drive prompted the Fire Prevention Bureau and the Civic Bureau of the Chamber of Commerce to enlist further public interest in fire prevention by conducting Portland’s first “Waste Paper Day” on July 25, 1916. A special appeal was made to every child in the entire city and a date chosen that would not interfere with the children’s school activities (38).

Captains of the fire stations were purchasing reception agents for the waste paper. That day the children of Portland collected \$1,645.00 for 235 tons or about 15 carloads of waste paper (41)

Burning cigar or cigarette butts tossed out of windows in the downtown district caused so many fires in summer that an ordinance was passed making this thoughtless act unlawful (42). The Fire Marshal, always alert, stood literally at the elbows of the entire Portland citizenry with warnings and timely suggestions for the prevention of fire (43 & 44).

“A fire prevented is better than a fire extinguished. The prevented fire causes no loss of life, no destruction of property and no interruption of business”, so read an excerpt from a pamphlet issued by Fire Marshal Stevens shortly before Fire Prevention Day, October 9, 1916. Fire loss for 1916 was cut to less than half of the 1915 record. The exact amount, \$554,232.63, the lowest fire loss Portland had enjoyed in nine years (1).

Fire Marshal Stevens left the Portland Fire Department in 1917 to accept manager-ship of the Pacific Coast Fire Underwriter’s inspection bureaus. Prior to going to this work he spent two months organizing Oregon’s newly created Office of State Fire Marshal (47). Battalion Chief John E. Young temporarily took over the work of the Fire Prevention Bureau in April and carried it through the year (1).

This was the year of teeming war activities and preparations. Shipyards rose along the water front and newcomers flocked to the city to engage in shipbuilding. Industry operated at top speed and every dwelling, apartment house and building was filled to capacity. Portland paused long enough in war preparations to observe Fire Prevention Day in October. A feature of the day’s observance was a fire hazard hunt through the city’s commercial and industrial districts by civic leaders in company with fire department inspectors (48). All Portland was fire-prevention-minded in 1917. Fire danger was further lessened by a patrol of armed guards stationed along the waterfront to protect the docks, warehouses and shipyards from possible enemy sabotage (49 & 50). This, coupled with the intensive fire prevention program of the two years previous, resulted in a fire loss of but \$276,744.40 which was the lowest loss experienced by the city since 1901 (1).

Battalion Chief Edward Grenfell was appointed fire marshal in 1918 and served in that capacity until January 31, 1928, at which time he was appointed chief of the Portland Fire Department (1). Portland possessed the best fire record of the nineteen principal cities on the Pacific Coast in 1918; having an average of only 401 fire alarms per thousand population as compared with 657 for the other municipalities. The property loss was \$417,774.96 and only three lives were lost because of fire. Inspection of buildings numbering 54,003 resulted in the elimination of 10,000 fire hazards and the wrecking of 101 dilapidated buildings. The reward for this record was a reduction in Portland fire insurance rates averaging ten percent (51).

Individual Liability Becomes Law

Portland was distinguished as one of the first four cities in the United States, and the first on the Pacific Coast, to enact the Individual Liability Law. This fire prevention measure, passed by the city council in August, 1918, empowered the fire marshal or his deputies to determine and to have abated anything, which in their opinion, constituted a fire hazard. The ordinance fixed a liability and a penalty for failure of the property owner to observe the regulation. The enactment of this ordinance provided the fire marshal with a more effective means for enforcing fire prevention measures than moral suasion and public enthusiasm (51 & 52).

Again a Poor Risk

Portland slipped from the honored position attained in 1918, however, with fire losses rising to \$552,530.52 in 1919; \$1,126,396.87 in 1920; \$728,717.70 in 1921; \$1,450,618.45 in 1922. As a result the city was again rated as a poor risk by the fire insurance companies. Then followed a \$1,235,918.38 loss in 1923; \$975,843.26 in 1924 and \$1,107,366.95 in 1925 (1, 53 & 54).

Contingent upon this record are many factors over which the fire department had little control. Shopkeepers, stocked with 'goods bought at war prices and facing a loss due to drop in market values, often found the temptation to make up the difference by collecting on fire insurance policies too great to resist,. The Armistice brought shipbuilding and other war-time industries to an end and guards no longer patrolled the waterfront. The fire losses attributed to Portland were advanced several thousands of dollars by fire on ships over which the fire bureau had no jurisdiction. The indefatigable and very successful efforts of a clever pyromaniac over a period of three years or more also increased the city's fire losses by several thousands of dollars (49 & 55).

Portland's improved building code, made effective March 13, 1918, ordained that all stairways and elevator shafts of new buildings, three stories or more, must be enclosed with fireproof material and entered through fireproof doors. The ordinance, however, was not retroactive. There were in Portland many firetraps with open stairways and elevator shafts (56). Following the Cudahy Hotel fire, December 2, 1918, in which one man lost his life and several were injured, H. E. Plummer, chief of the city's building bureau, declared that "such buildings constructed before there were building regulations are fire traps" and urged that old buildings be remodeled to meet the building code requirements for new structures (57). Since such alterations were expensive, and since there was no law requiring compliance with the suggestion, the improvements were not made.

Death by Flame

The Elton Court fire on August 7, 1920, rudely awakened Portland from lethargic indifference to existing danger. Elton Court, a residential hotel of the better class, caught fire, through a smoker's carelessness, in the first floor lobby. The flames rapidly swept to the top of the building through open stairways and elevator shafts. Sleepers were aroused about five o'clock in the morning to find the halls filled with smoke and flames. All means of escape, except through the windows, were cut off. The building had only one fire escape, the minimum required by law for buildings of that class at the time. It was of little use as it ended twenty feet from the ground. When the fire department arrived smoke was pouring from every window in the four-story building. The cries of the trapped victims added horror to the scene. Rescue work was started immediately but in this the firemen were handicapped by the lack of adequate ladders. Four deaths, one of a woman who fell while being rescued, two who jumped from upper story windows unable to bear the torture of the flames any longer and another who died from burns, and a dozen

or more minor hospital cases, were the results of this holocaust (49, 58, & 59).

The Glenwood Hotel fire four days later demonstrated the wisdom of safety measures in contrast to the danger of open stairways and elevator shafts. Circumstances were similar to the Elton Court fire. The Glenwood Hotel was a four-story building of seventy-two rooms with sixty-five occupants. Fire started, about four-thirty in the morning, at the bottom of the elevator shaft and the flames quickly shot to the roof before they were controlled. The enclosed elevator shafts, however, confined all damage to the shaft, attic and roof. Although the stairway was next to the elevator shaft everyone leaving the hotel could use it and nobody was in anyway injured by fire (60).

An Awakened Press

Following the Elton Court fire the Portland press, especially the Portland Telegram, began an intensive crusade against the city's existing fire traps. Reporters accompanied the fire marshals on inspection tours of hotels, apartments and rooming houses. It was found that fifty percent of these buildings were as hazardous as Elton Court if not more so. Nor was the danger confined to the so-called cheaper lodging houses but was present in many of Portland's finest hotels. Newspapers urged the immediate passage of an ordinance forcing property owners to eliminate this danger (60).

"I want an ordinance drawn up which will make it impossible for such a disaster ever to happen in Portland again," Mayor George L. Baker told Fire Marshal Grenfell following the Elton Court fire. Ordinance 38116, drafted by the Fire Marshal and Building Inspector Plummer to meet this request, was unanimously passed by the city council on October 2, 1920. This ordinance, providing for the protection against fire in all existing buildings used as "hotels, lodging houses, apartment houses and for similar purposes," required that "elevator shafts and elevator machinery" be enclosed as demanded by the Building Code ordinance No. 33911 "for new buildings of the same construction." It also ordered "an enclosure of stair wells" an exception being allowed in three story buildings if "an automatic sprinkler system provided covering all portions of the basement, public corridors and any rooms which have open doorways into public corridors and all portions of the stairs including platforms, returns and all portions of the stair wells or shafts." Such sprinkler systems were to comply fully with the specifications of the National Board of Fire Underwriters.

Another alternative was offered "to any building so arranged that every apartment and every sleeping room not contained in an apartment in the second story and all stories above directly connected to a standard fire escape shall not be subject to the provisions of this ordinance." It was further ordered that all "light wells or shafts be enclosed as required in said Building Code" and "all openings into such enclosures shall be protected by metal window frames filled with wire glass or by kalamein or standard fire doors." The ordinance also required that "any chute for laundry, paper, dumb-waiters and similar openings not enclosed as required for elevators shall be enclosed and have the inside lined with metal lath and plaster or metal" according to the requirements of the Building Code. The Fire Marshal and the Building Inspector were jointly empowered to enforce

this ordinance. Upon receipt of a written notice from these officers “actual work of alteration or re-modeling” was to be started by the building owner “within thirty days of the receipt of such notice and shall be completed within ninety days from the date of receiving such notice” (61, 49 & 62).

The Hotelmen’s Association and realty operators made persistent efforts to block the passage of the ordinance. Failing in this the Portland Hotel brought suit against the city to check enforcement. The hotel won the first suit through an interpretation of Section I, wherein a building was exempt from the requirements if every apartment and separate sleeping room on the second story and above was “directly connected to a standard fire escape.” However, the direct connection in many instances made it necessary for the room occupant to go into the hall in order to reach the “directly connected” fire escape. The words “directly connected” were defined more specifically in an ordinance passed October 19, 1921, as meaning “an arrangement of rooms and fire escapes such that a person can step through a door or window that can be opened (the area of the opening being not less than six square feet, with a minimum width of eighteen inches) from the room or apartment” (49, 62 & 63).

The hotels, still unwilling to meet the requirements of the ordinance, prolonged the law suit in the name of the Portland Hotel, until January 29, 1923, at which time, upon the advice of the architects, it was decided it was cheaper to comply than fight. On the 19th of February, the Portland Hotel took out a permit for the alterations, amounting to \$8,000. Meantime, the Goodnough Building tried to prevent enforcement of the ordinance by an injunction against the city. This effort also failed. With victory finally established for Ordinance No. 38118, Portland advanced another step in fire safety (49, 62 & 66).

Mysterious Fires

Beginning in 1922, mysterious fires at night, sometimes at the rate of one a week, seriously interfered with any marked reduction in losses. The fires were obviously set by one person. Methods employed were always similar. It seemed to make little difference whether the building was a \$25,000 plant or \$100 barn. Empty school buildings, vacant houses, churches, halls, barns, warehouses, and garages flamed in succession. The nature of the fires made it obvious that they were not burned to collect insurance.

In hope that some betraying move would point to an arsonist, Fire Marshal Grenfell detailed men from the department to attend every fire, dressed in plain clothes, to mingle with the crowd and to watch the attitude of the spectators. One face always appeared among the group of working firemen. With suspicion firmly pointing to one of their own members, men from the department were assigned to watch him at all times.

The man was clever and fearless. Mounted on a motorcycle he eluded his pursuers night after night. Being unable to find evidence to convict the man whom they believed guilty of the crime, the police, through a charge of speeding, denied him use of his motorcycle. On foot, however, he continued to play his costly game and for months evaded his followers.

Squads of firemen on their nights off, members of the police department, and other city agents as well as outside individuals worked together to trap the fire bug. Sometimes as many as twenty-five worked together. Through this mass effort, the culprit was apprehended one night in February, 1925, as he was setting fire to a private garage. He made a full confession. It was estimated he had set more than sixty-five fires entailing a loss of about \$500,000. The court judged the man a pyromaniac and assigned him to the state hospital for treatment. Thence forward the city's fire losses began to decrease (49 & 65).

Firetraps Must Go

Fire Marshal Grenfell carried on an intensive campaign against old and dilapidated buildings which, having passed their usefulness constituted fire hazards (72). Beginning in 1922 and up to and including 1927 an average of two hundred and fifty such buildings were wrecked yearly. Fire Marshal Roberts has continued this work and the average has become even higher, the greatest number being wrecked in 1930 when 640 old buildings were razed. During the past ten years over 4,000 old, unsightly and unsafe buildings have been removed and the lots cleared of debris (1).

Battalion Chief Roberts, long associated with the Portland Fire Department, and a member of the arson squad that gave such invaluable service in apprehending Portland's arsonists, became the head of the Fire Prevention Bureau in 1928. Results of his indefatigable efforts to reduce Portland's fire losses are shown in the following table:

1928 -----	\$841,252.75
1929 -----	911,813.45
1930 -----	915,574.64
1931 -----	929,433.70
1932 -----	672,340.59
1933 -----	662,340.59
1934 -----	631,072.05
1935 -----	499,842.02
1936 -----	433,040.20
1937 -----	367,316.25 (1)

Fire losses in Portland for the first six months of 1938 have set a new low record of \$100,000, a per capita loss of 27 ½ cents. If this record holds throughout the year Fire Marshal Roberts will have realized his ambition of an annual fire loss of less than a dollar per capita. In ten and a half years not a single person has lost his life by being trapped in a building (1 & 68).

Fire Marshal Roberts inaugurated a new system of building inspection in 1930, thereby relieving the company of captains and lieutenants of work which, up to that time, had been carried on by them. Under the new plan thirteen men, who have had five years or more experience in the fire department and who have made a study of fire prevention are

detached from their companies (with the exception of major alarm fires) and are assigned to inspection work. The chief inspector, working under the direction of the Fire Marshal, heads this department and inspects theaters, hospitals, institutions, and oil burning installations. For administration purposes the city is divided into eleven districts with an inspector assigned to each. He makes regular inspections and keeps a close check on fire hazards in all industrial sections of his territory. Another inspector, assigned to the schools of the city, public, private and parochial, conducts fire drills, gives fire prevention talks and sees that safety is maintained and fire ordinances are enforced. The inspectors are empowered to enforce the fire code in all instances. Property holders, occupants or agents are notified to abate existing fire hazards. After a reasonable lapse of time a follow-up inspection is made to determine whether or not the notice met with compliance. If the notice is consistently ignored an arrest is made under the ordinance covering the violation. This latter, in the majority of cases, is unnecessary. In 1937, 44,593 inspections resulted in the elimination of 34,766 hazards.

Work of the Prevention Bureau

Reports of all such notices are filed daily at the Fire Prevention Bureau. The inspectors meet daily from 8 to 9 to receive instructions, to make out reports and to study and discuss features of the work which arise from time to time. In addition to their regular daily rounds inspectors are detailed to attend large public assemblies to enforce ordinances pertaining to such gatherings.

After each Portland fire, the arson squad of the Fire Prevention Division determines the cause, the amount of loss, the value of property involved, the names of interested persons, and the amount of insurance. This staff, consisting of a chief inspector and two assistants also working under the direction of Fire Marshal Roberts, is ever on the alert for evidences of arson. When a fire appears to be of incendiary origin, photographs are taken, evidences sealed, labeled, dated and preserved for grand jury investigation. In several cases, where it has been impossible to bring sufficient proof of arson to assure conviction of the suspect in court, the insurance companies have been convinced enough by the results of the investigation to refuse to pay the loss.

The Fire Prevention Bureau maintains a complete file of records. All fires entailing losses, since 1913, are recorded by a card filing system, giving names of all parties involved, cause of fire, whom or what was responsible, amount of loss, value involved, the amount of insurance, and with whom the property was insured. A cross index by streets and by names of property owners makes these records readily available at all times. Records of installation permits and inspections of appliances which might develop into fire hazards are also kept. On April 23, 1936, a new ordinance was drafted covering the installation of oil burners. Within two years over seven thousand permits have been issued and inspections made of appliances coming under this ordinance (1, 68 & 69).

Fire prevention is dependent upon the cooperation of the entire citizenry of Portland. Public spirit and law enforcement are powerful weapons in preventing fire. Pertinent ordinances enacted from time to time have greatly assisted the Fire Marshal in the

discharge of his duties. The Fire Prevention Division works constantly to obtain public cooperation by special emphasis upon particular occasions such as Clean-up Week in the spring and Fire Prevention Week in October.

Fire Prevention Week

Fire Prevention Week, always the week including October 9, is the high point of the fire prevention publicity campaign and has been observed in various manners during the past twenty years. This work has centered around the schools, with playlets, essays, lectures, movies, contests and instruction in fire prevention being used. Text books for instruction have been prepared by the Fire Prevention Bureau for both the grade and high schools. Pamphlets, with cuts illustrating forty-eight possible fire risks around the home, have been distributed among school children, with a printed form whereon the children can list hazards which they have eliminated from their homes after reading the leaflet.

Merit badges have been awarded to over 11,000 Boy Scouts for completing a special instruction course in fire prevention. The junior fire marshal's badge is a coveted possession among the smaller children. These were awarded when the children appeared at their local fire station and answered ten test fire prevention questions (70).

A high school fire prevention oratorical contest is another feature of the Fire Prevention Week. This takes form in a preliminary contest in each school and a final contest among all first place winners. Cash awards are given in each contest. These contests, originating in 1926, were continued until 1932. Last year (1937) the Portland Junior Chamber of Commerce cooperated with the Fire Prevention Division in reviving them. The winner in 1928, Ralph McCullough, Franklin High School, was sent to Philadelphia to deliver his prize winning oration at the convention of the International Association of Fire Chiefs. Subsequently, the Fire Prevention Division received requests from many cities for the details and plans of the contest. Fire prevention poster contests among the school children are featured in the spring. Local winners in each division, grade and high school, submit entries in at contest sponsored nationally by the National Fire Protection Association (68).

The Fire Prevention Division employs many means for directing the attention of adults towards fire prevention week. During that week, and at any other time during the year, the division supplies speakers for luncheons or meetings to discuss fire prevention. The fire prevention parade, planned to be interesting and instructive is always a high spot of the week. The ancient fire equipment usually passes in review. At one time the evolution of the fire department from Roman times to modern was the theme. In addition to newspaper articles, printed pamphlets, radio programs and Fire Department band concerts, many ingenious stunts, contests, and exhibitions which will amuse and instruct the public have been devised. Among them a milking contest, further immortalizing Mrs. O'Leary's cow, was conducted in a roped-off section on a principal street. Log chopping contests among the firemen, turn-out races demonstrating how quickly a fireman can scuttle out of bed at the sound of a fire alarm; water fights, hose cart races, life net drills, exhibition drills from tops of office buildings and fire hazard demonstrations, all have

been used. Fire prevention leaflets have been scattered among street crowds from the top of ladders on aerial trucks stationed at downtown corners. Alarms have been turned from boxes at different sections of the city. When the crowd gathered, as it always does when the fire department is out, a speaker who arrived with the truck addressed spectators on fire prevention. The fire stations hold open house during fire prevention week. The public is invited to visit the station, inspect the equipment, and become acquainted with fire department methods. Stores donate windows during the week for fire prevention displays. Preceding the fire prevention week stickers and enclosures are pasted on or included in all bills, letters, and packages sent out by the public utilities, water bureau and department stores. Loud speakers have been installed at strategic corners over the city to call the attention of passersby to fire prevention. The program is further advertised by a placard covered street car, carrying a loud speaker, which travels over the city reminding the public of fire prevention week. The danger of fire hazards and the efficiency of the fire department has been demonstrated by the burning of a house at Multnomah Stadium field. The use of modern fire fighting equipment and of salvage covers to protect furnishing from damage by water is displayed in this demonstration (70).

Fighting Fire on the Air

Daily radio broadcasts over station KXL, under the auspices of the Fire Prevention Division, were begun in 1930. These broadcasts included a resume of fires occurring during the previous twenty-four hour period, told how each fire could have been prevented, and gave seasonal warnings of fire dangers. A daily list of fires, giving names, location, causes and amount of damage, is included in the vital statistics column of the newspapers (70).

In the interest of fire prevention all tank trucks carrying gasoline, oil, and carriers of explosives and inflammables must follow certain prescribed routes through the city. They are allowed to leave these lanes only for the purpose of making deliveries (70). A series of classes, under the auspices of the Portland Fire College, and supervised by Battalion Chief E. L. Boatright, each year acquaint night watchmen and building custodians with practices in fire safety. Buildings change character -- a warehouse may be remodeled as an apartment -- and conditions arising from the change create a new set of fire possibilities, over which the Fire Prevention Division must keep check in order to maintain ordinances covering such alterations. Seasons have their particular fire hazards. During the Christmas rush reminders are sent to store managers of fire danger and panic existing in over-crowded stores, with recommendations for the maintenance of required aisles and means of egress, and for the disposal of waste materials. Follow up inspections are made by the district inspectors. With the thought of disposing of Christmas trees and thereby eliminating another fire risk an old country custom, "Burning of the Greens," a public Christmas tree bonfire was sponsored and promoted by the Portland Advertising Club in cooperation with the fire department in 1937 (68, 71).

A new Fire and Explosive Hazard Ordinance has been prepared by the Fire Prevention Division. Mimeographed copies are now (June 1938) in the hands of a citizen committee for criticism and recommendations before being presented to the city council for passage.

This new proposed fire code is complete and comprehensive, including almost five hundred sections, and conforms, as nearly as the peculiar characteristics of Portland will permit, to the requirements of the National Board of Fire Underwriters and the National Fire Protection Association. The ordinance covers every known means of fire prevention and regulations for fire safety over which it is possible to legislate (68, 71).

The effect of prudent ordinances and fire prevention propaganda in decreasing fire waste is greatly lessened each year by public indifference. One of the most flagrant examples of this is smokers' carelessness. According to the Fire Marshal's report for 1937, of the ninety-two listed causes for 3,480 Portland fires during the year, smokers' carelessness was second both in the number of fires per cause and the amount of loss per cause with 287 fires resulting in a \$48,618.97 loss (71).

THINK!

Notices reading "THINK, a false alarm may cost a human life" are posted on all alarm boxes. Such admonitions have little effect upon children, drunken persons and the plain garden variety of fool. One of the latter class had the fire department running around in circles a short time ago when he made it his pleasure to ride around town pulling alarm boxes in different sections of the city. An arrest which netted a jail sentence finally brought an end to his entertainment (68).

Portland has reason to be proud of the position attained in fire prevention through the work carried on by the fire department. The efficiency of the Fire Prevention Division was recognized nationally in 1925 when Portland placed first in the Inter-chamber Fire Waste Contest conducted by the Chamber of Commerce of the United States. Since that time the city has always ranked among the first ten places. Awards, made yearly to the cities of 250,000 population or more, are given in recognition of fire prevention activities and reduction of fire losses. The city must also give factors responsible for this reduction in fire loss to be eligible for the award. Recognition of merit for fire prevention activities from the National Fire Protection Association has been awarded to the Fire Prevention Division of Portland for the past several years. Local recognition of valuable service in fire prevention has also come from the State Fire Marshal's department.

Since 1914, Portland has advanced from one of the poorest fire risks in the United States to one of the best. The continued and intensive work of the Fire Prevention Division and the efficiency of the entire Portland Fire Department are responsible for this distinction for reduced fire insurance rates and increased safety to life and property throughout the entire city.

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FIRE PREVENTION

The accompanying graph illustrates the results of fire prevention work during the twenty-four years of the Portland Fire Prevention Division's existence. Although the city has increased in area and population during that time, the fire losses have never reached the \$1,762,493.46 high point of 1914 by several thousands of dollars; conclusively proving that fire prevention has paid in Portland, Oregon, and can also be made to pay in any other city.

