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FIRE AND WATER ENGINEERING.

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FIRE AND WATER ENGINEERING

The Water Works Associations
Fire Engineers' Associations
League of American Municipalities
International Association of Municipal Electricians.

New York, Wednesday, March 29, 1911

Entered at New York at second-class matter.

The long-expected has happened. New York has had its anticipated holocaust, burning and crushing to death at least one hundred and fifty men and women. The fire in the three top stories of a Washington place shirt waist factory where more than seven hundred persons were employed, on Saturday last, emphasizes several things, not the least of which is the absolute need of first-class discipline in such extreme emergencies as this. Had fire drills been observed in the establishment of the Triangle Shirt Waist Company there is no question that most of these lives would have been saved. That the owner of the building had complied with the laws governing fireproof construction is admitted by Fire Commissioner Waldo and Chief Croker, but he had done no more. It was one of those cases which Chief Croker is accredited with saying that only one fire escape was provided for fear that more than that number would destroy the beauty of the building, and the officials had no authority to cause the placing of more fire escapes. It appears to have been pretty definitely settled that the flames were started by a burning cigarette stub thrown into a collection of inflammable material. This points to another lack of discipline, as smoking should not be tolerated in such a place. It has been charged that the company, or firm, had made a practice of keeping the doors locked to prevent tardy employes from slipping in without detection, and to compel all to go out through one door, under scrutiny, to prevent petty thefts. How true this is will be ascertained after further investigation. One thing, however, seems to stand out very clearly—that the proprietors of nearly all such factories, in their eagerness to make money, place too small a value on human lives. As the greater portion of such employes are illiterate and devoid of good judgment, especially in periods of extreme excitement, panic and disorder must be expected. But this is only one disaster; it had been predicted by Chief Croker, who expects to see others of similar shocking character, as there are said to be seven thousand buildings similar to this ill-fated one, and twenty thousand more that are almost equally dangerous to human lives. Such calamities only serve to teach lessons; they do not compel practice.

Despite the efforts of the Illinois underwriters to facilitate the passage of the bill to give weight to the fire marshal law, no progress seems to be making on the part of the house committee having it in hand. This inertia creates the suspicion that certain members of the committee want to bury the measure for political purposes. In fact, it is openly charged that the neglect is actuated by a determination to deprive Governor

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Deneen of the dispensing of the patronage that will follow such a law. Considering the imperative need of the fire marshal's office in Illinois, the committee's attitude is looked upon as the worst kind of political chicanery. Anticipating the creation of the new office of State Fire Marshal, one-quarter of one per cent. has been collected from fire insurance premiums for the past two years and the sum so collected amounts at the present time to about \$80,000. This money lies idle in the State Treasury solely because members of the Legislature refuse to act in the interest of the commonwealth. Meanwhile the fire waste goes on unchecked and incendiaries driven from adjacent States through the activity of conscientious fire marshals are said to be finding an excellent field for their nefarious practices in Illinois. Such misrepresentation by officials belies the very name of the State they pretend to serve. Tradition tells us that "Illinois" is a derivative of "Illini," meaning "superior men," but the conduct of the legislative committee concerning the fire marshal law seems to imply that the less euphonic cognomen, "Sucker State," is preferable.

Nobody has ever, to our knowledge, entertained the belief that conditions surrounding the moving picture theaters of this city approached a semblance of safety when viewed from the standpoint of fires. Now, after a thorough investigation of fifty of these amusement places in Manhattan by Commissioner of Accounts Raymond B. Fosdick, this public apprehension of danger proves to have been well founded. According to his report to the Mayor it is learned that the Commissioner found inadequate protection from fire or panic, poor sanitation and dangerous overcrowding. One proprietor is accredited with having declared that to comply strictly with the law would mean the elimination of one-half of those cheap amusement resorts. Most of them are conducted under what is called "common show" licenses, and are not large enough to come within the building code provisions which govern the ordinary theater and consequently impose greater expense. It is noted, however, that while little advancement has been made toward reducing the fire hazard, the character of the pictures has been materially improved, which is largely due to the censorship over the films. Commissioner Fosdick says that it is possible that a comparative study of the conditions surrounding moving picture shows and other places of congregation, such as churches, department stores and manufactories, would demonstrate that the latter are no more perfectly protected against fire fatalities than the former. It is recommended that a committee of fire officials be instructed to make a careful examination of all the moving picture shows in the city and that the licenses of places considered unsafe be revoked.

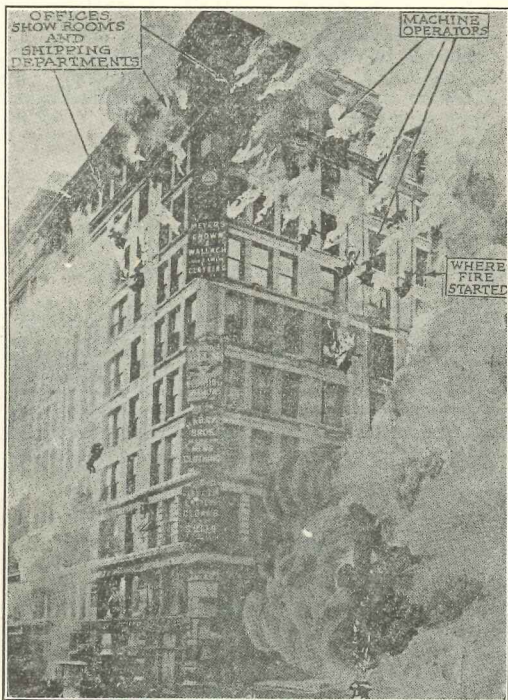
Indications point to an exceptionally sane Fourth of July this year. And this in reality is the direct result of agitation and publicity. For years sentiment against the use of fireworks and useless noise has been growing until now the public has come to see the propriety of its entire suppression. Last year the falling off of the fireworks business was a severe blow to the manufacturers of and dealers in combustibles, and the future promising no improvement or a restoration of former lucrative trade, the leading pyrotechnist of this country, the Pain Manufacturing Company, has retired from business. But while the revolution of public sentiment has thus wrought calamity to a few individuals, it has been of substantial benefit to the country at large.

The time had come when "The Spirit of Seventy-six" was literally obscured on the Fourth of July by the satanic desire to make noise and burn powder. Not one in a hundred young Americans could give an intelligent idea of what the day really commemorates. It is earnestly to be hoped, therefore, that the rejection of this insane, freakish manner of celebrating America's Natal Day will continue to grow and spread and that the event may hereafter be observed with greater reverence (but with equal zeal) in a manner more in keeping with advanced education and inherent patriotism. The pageants that may be substituted in every city, including both military and civic bodies and children of the public schools, will do more to perpetuate patriotic zeal than the burning of a million tons of powder and the creation of bedlam, not to mention the reduction to a minimum of the services of hospital surgeons and nurses. But perhaps no greater benefit can accrue from the altered conditions than the obliteration of one of the greatest fire-loss causes, as statistics produced by the underwriters show that many hundreds of thousands of dollars' worth of property are reduced to ashes on this annual holiday. The complete transformation from scenes of madhouse behavior, devilish caprice and destructive flames to the orderly observance of Fourth of July will, we believe, be appreciated even in this cosmopolitan city.

Should the bill introduced in the New Jersey Legislature last week by Assemblyman Balentine become a law, the factories in that State will be something else than fire traps. This contention, however, is made on the assumption that the law will be enforced. It not only says that fire escapes must be on all buildings at least two stories high, but specifies how the escapes shall be built, of what material, and generally safeguards factory employes. The measure also provides that there shall be a fire drill at least once in every month. It follows closely the Massachusetts and Pennsylvania laws, in that it gives the State Factory Inspector power to close factories if his orders are not obeyed. Buildings more than two stories high used for manufacturing purposes shall have at least two means of egress communicating with each story, one of which shall be an inside stairway and the other an outside fire escape. The bill further says: "All installation of fire escapes or stairways shall be made with reference to the maximum number of persons to be employed upon each story of any building or separated subdivision thereof, statement of which number shall be posted by the owner upon the wall of each story or separated subdivision thereof, so as to be visible at all times. Under no circumstances shall this number, when once ascertained and installation of fire escapes and stairways be made with reference thereto, be exceeded except by permission of the commissioner. Factory buildings more than two stories in height shall be equipped with a system of fire alarm with sufficiently large gongs located on each floor of the factory building, or within each separate room where more than one factory is located on a single floor. The system shall be so installed as to permit the sounding of all the alarm gongs within a single building whenever the alarm is sounded in any one portion thereof. The means of sounding these alarms shall be placed within easy access of all the operatives within the specified factory or room, and shall be plainly labeled. This system of fire alarms is not to be used for any purpose other than in case of a fire or fire drill, and it shall be the duty of the person in charge of any factory or section of a factory wherein a fire originates immediately to cause an alarm to be sounded."

NEW YORK'S LATEST HOLOCAUST

The fire on the three top floors of the ten-story factory building at Washington Place and Green street last Saturday afternoon, at which time approximately 150 men and women were burned or crushed to death, further emphasizes the necessity of maintaining discipline among employes in times of extreme emergency. The statement of Chief Edward Croker that the fire doubtless was started by a burning cigarette stub, carelessly thrown into a collection of inflammable material is probably

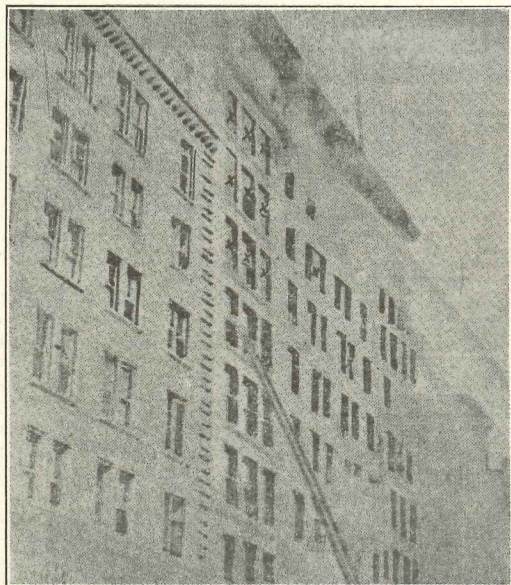


VIEW OF FIRE IN THREE UPPER STORIES OF ASCH BUILDING.

correct. A large percentage of the men and boys employed in these shirt-waist factories are inveterate cigarette smokers, and are usually unmindful of what disposition they make of the burning stubs and matches. The building, which is owned by J. J. Asch, of Norwalk, Conn., was ten years old, constructed of brick and iron, ten stories high, and classed as fireproof. There is but one outside fire escape, which seems inadequate when it is considered that 1,000 persons are employed in the building. There are two iron stairways located at Green street and Washington Place, which were considered good, and four elevators. In the way of fire appliances, there is telephone connection with departmental headquarters by pneumatic system; two four-inch standpipes connected outside with No. 2 size siomes, three inches; eight by ten foot water tank on roof with a capacity of 5,000 gallons; and buckets to the number of 300 scattered around the building. The building had been inspected by order of the fire department on Oct. 15, 1910, by Edward O'Connor, foreman of Engine Company 72. Fire Commissioner Waldo has issued the following statement: "The loss of more than 140 lives resulting from the Washington Place fire has demonstrated forcibly the contention of the Fire Department that while buildings may be fireproof the contents are not fireproof. Therefore, fire escapes and other good and sufficient means of exit should be required in buildings of this character, especially those in which large numbers of persons are assembled for work or other purposes. There are many buildings of this class in this city in which even worse conditions prevail. In the opinion of this department the means of exit from this building were insufficient. There was only one outside iron balcony fire escape, which was so constructed that when iron shutters on windows were opened it was impossible for persons to use it without first closing the shutters, which could not be done if persons were endeavoring to escape from the windows from the lower floors. There were two inclosed fireproof stairs with window doors and 'jambbs.' These doors were consumed by the fire and left the stairs open to the flames.

These stairs were only sufficiently wide for one person to descend at a time and with winding steps at the turns. Entrances to stairs were blocked by partitions. From indications, gates and doors appear to have been locked at the time of the fire. The Fire Commissioner is endeavoring to secure legislation which will create a bureau of fire prevention, with sufficient legal power to install automatic and auxiliary fire appliances, to enforce fire preventive measures and to give to the department the right to insist on adequate means of escape in case of fire. The fire department is the most competent to pass on the necessity for fire escapes, due to their experience with fires. Several days ago a meeting was held in a Wall street law office denouncing the action of the department in requiring automatic sprinklers in buildings which, in the opinion of the department, required the same. Under the present law, the fire department has no control whatsoever over fire escapes or means of exit from fire."

Albert Ludwig, chief inspector of the Bureau of Buildings and acting superintendent in the absence of Superintendent Rudolph Miller, made the following statement for his bureau: "The building could be worse and come within the requirements of the law. It is not required by law that the elevators and stairways be inclosed. These are in this building, although the fire doors are not self-closing and on the upper floors of the stairway are made of oak and wireglass, instead of being fireproof. I am not prepared to say whether the dimensions of the fire escape are within the law. As in Section 103 of the Building Code the Superintendent of the Bureau of Buildings can use his discretion as to the means of egress to the fire escapes, therefore, we would insist upon a fireproof passage from the court at the foot of the fire escapes to the street. Evidently the condition in this building met the approval of the Building Department when it was erected in 1900. When I investigated the building I found the structure all right, except

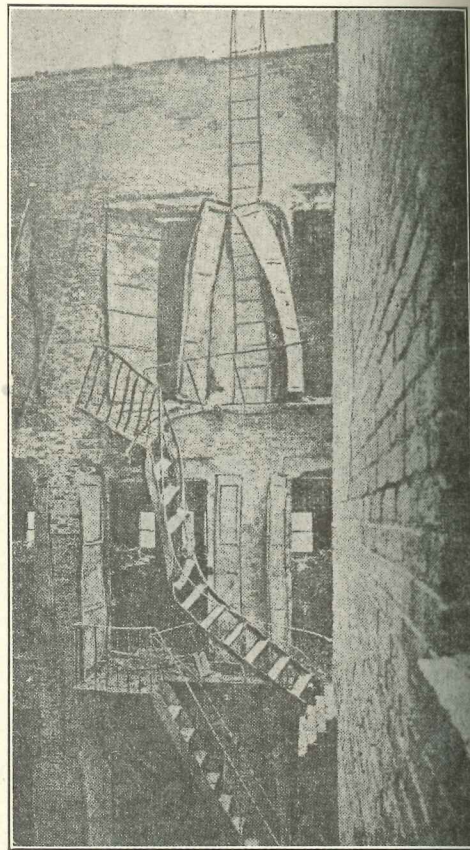


UPPER PART OF ASCH BUILDING. X SHOWS FLOORS BURNED.

for the lintels on the top floor and some tiling which had been destroyed. There were fire escapes, because all loft buildings must have them."

From the investigation it appears that there had been delay in sending in the alarm, and that no attempt had been made to put the fire out in its incipency by using the buckets or hose on each floor. Panic seized the 700 men and women, who stampeded each floor in their eagerness to escape. Speaking to delegates from twenty philanthropic organizations and settlement workers, who met last Sunday in the headquarters of the Women's Trade Union League to plan a mass meeting to discuss problems suggested by the Triangle Waist Company's fire, Leonora O'Reilly, a leader in the strike in the company's plant last year, declared that to her certain knowledge the

doors on the eighth and ninth floors of the building were locked fast at the time of the fire last Saturday afternoon.



SHOWING CONDITION OF FIRE ESCAPE REAR, OF ASCH BUILDING AFTER FIRE.

More Pay for New York Firemen.

Increases in the salaries of the officers and members of New York City's Fire Department are provided for in a bill introduced in the New York Legislature by Assemblyman Hackett. The bill authorizes the appointment of a deputy chief for Brooklyn and Queens at a salary of \$7,500 a year. The salary increases which the measure allows are as follows: Chief of the fire department, from \$6,000 to \$10,000; battalion chiefs, from \$3,300 to \$4,300; captains or foremen of companies, from \$2,160 to \$2,500; lieutenants or assistant foremen of companies, from \$1,800 to \$2,100; pilots of fireboats, not less than \$1,500 nor more than \$1,800; engineers, from \$1,600 to \$1,800; members of the first grade, from \$1,400 to \$1,600; second grade, from \$1,200 to \$1,400; third grade, from \$1,000 to \$1,200; fourth grade, \$800 to \$1,000. There is no doubt that the bill will become a law.

Sacandaga River Reservoir.

The State water supply commission has set a hearing for April 11 at Albany on the proposed construction of a reservoir on the Sacandaga River for the regulation of the flow of the Hudson River, with a view of abating spring freshets. The estimated cost of the reservoir is \$4,661,000, of which \$4,427,950 is to be assessed on individual property owners and the remainder on the counties, towns, cities and villages to be benefited. The estimated cost includes the land which will be flowed by the reservoir, the construction of a proposed dam at Conklingville, new highways and the changing of a section of the Fonda, Johnstown & Gloversville Railroad. The reservoir site will cover eighteen towns and villages and the cities of Glens Falls, Cohoes, Troy, Watervliet, Rensselaer and Albany are included in the improvement district. The individual properties include several mills and power plants upon the Hudson River between the Sacandaga River and Troy.

Wisconsin V.

The latest annual report of the Wisconsin Railroad Commission, which comes the water system, contains much information that is of interest to the public. The commission has been made of water observation of representatives of the public utilities law, each of two plants, one of which is privately owned and the other called for by city authority. In the latter cases, two franchises governing the water supply are one year apart on the



SECTION OF THE

engineers of the commission as observers to gather the results primarily to which the several sections with tests of the staff who have called as witnesses to service in a suit. It was understood that and with the president trial, that the testimony was to be rigidly not referred to were franchise requirements lines with respect to streams sustained the with definite details kind and size of no representing convey that the height of the based upon the actual height of stream in actually realized in provided in a field tested reliable observed drant pressures. I observed by the noted at intervals sure gages, and also taken as to the purpose of verification to be essential for and also of economic required during a cording pressure the commission under the public Utilities Law. obtained, equipments and charts with twenty-four-inch use in ordinary practice two additional gageable pressure gages the whole making efficient "traveling" the results of a stream with reference basis are determined to the well-

