

Saturday, March 25, 1911, was a fine spring day in New York City. It was a workday, and many people—including the employees of the Triangle Shirtwaist Company, one of the city's largest garment manufacturers—were looking forward to their approaching day of rest.

The Triangle occupied the top three floors of the 10-story Asch Building near Manhattan's Washington Square. At 4:45 p.m., eighth-floor watchman Joseph Wexler rang the quitting bell, signaling the end of the workday.

The Triangle was a loft factory, so-called because it occupied the top floors of a tall building. A shortage of factory space in New York had forced many companies to set up factories in buildings originally designed as store rooms or offices. These locations allowed companies to keep their electrical costs low by taking advantage of sunlight.

The eighth floor was crowded. Of the more than 600 people who worked at the Triangle, 275 worked on that floor. Most were women who operated five tandem rows of sewing machines on 4-foot-wide tables (see Figure 1). Men staffed two cutting tables. What little floor space remained was partially occupied by stock.

The ninth floor was more crowded than the eighth. Nearly 300 women operated eight tandem rows of sewing machines on long tables (see Figure 2). The tenth floor housed the executive offices, the show room, the stock room, and the shipping area. Thirty of the 60 employees on this floor pressed manufactured shirtwaists with gas-heated irons (see Figure 3).

Most of the Triangle's workers were young women who were newly arrived in the United States. Although many could not speak English, they had found work making shirtwaists, high-necked blouses for women popularized by the Gibson Girl. The shirtwaist had made the Triangle a successful enterprise.

Working the sewing machines at the Triangle meant long hours. At quitting time, the women's purses were searched to ensure they weren't stealing. In addition, doors were often locked to prevent employees from slipping away from the work tables to rest. Workers who complained were fired.

"Fire on the eighth!"

When the quitting bell rang, production manager Samuel Bernstein was talking to his cousin, bookkeeper Dinah Lifschitz, who was at her desk near the west stairwell on the eighth floor. Bernstein supervised workers on the eighth and ninth floors. Eva Harris, who worked at the Triangle and was a sister of one of the owners, suddenly ran to them: "The boys

Casey Cavanaugh Grant, P.E.

Triangle Fire Stirs Outrage and Reform

The fire that swept through the New York City sweatshop in 1911, killing 146 garment workers, shocked the nation and ushered in a new era in life and fire safety in the American workplace.

are putting out a fire by the elevator on the Greene Street side!"

Bernstein hurried to investigate.

"I found a cutting table on fire and fire in a box of clippings standing beside it," Bernstein later recalled. Typically, the space under the wood cutting tables was used to hold scraps of cloth. Now flames were curling around the table top from the scrap bin. The last time the scraps had been emptied was on January 15, when a scrap dealer took away 2,252 pounds of cloth.

Bernstein and several cutters attempted to extinguish the flames using buckets of water. Before they could put out the blaze, patterns that were hanging on long wires used to store cut fabric began to burn. Cutter Max Rothen began tearing down the flaming cloth, but the fire was ahead of him and spreading rapidly.

Wood tables and chairs, the primary furnishings, ignited. Oil that had dripped from sewing machines covered the wood floor, and bundles of flimsy, combustible cloth and tissue paper lay everywhere.

A shipping clerk stretched a standpipe hose from the stairwell, but he and several other workers were unable to make it work. They began to realize their efforts were futile.

The fire was now out of control. A window broke as the result of the heat and pressure. People on the street below saw the first signs of impending disaster.

The eighth floor was crowded with workers waiting to use the elevators, and Bernstein yelled for the cutters to help the women escape. They had been watching fearfully and understood the urgency of the situation. Seeing the men retreat and the flames spread unchecked, they rushed to escape.

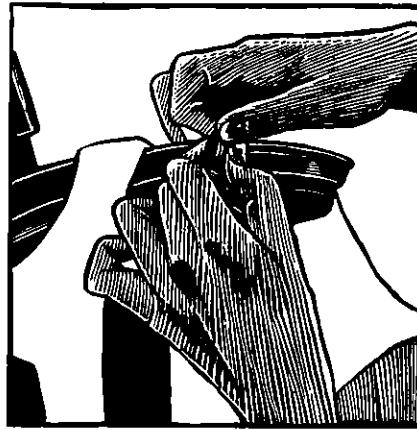
There were four ways out: two stairwells, an outside fire escape, and the elevators. The staircases were steep and narrow, with steps measuring only 2 feet, 9 inches wide, barely wide enough for two people traveling in opposite directions to pass one another. The iron fire escape leading to the rear courtyard was even more perilous, with steps only 17½ inches wide. It had been installed be-

cause the property did not have three stairwells. The two elevator shafts contained two cars each: One set of elevators was for passengers, the other for freight.

Some of the workers crowding in front of the elevators held their positions, ringing the elevator call buttons frantically. Each elevator had an operator, and they pushed their machines into action. The cars began moving up and down at a fast pace.

A small group of women and several cutters decided to use the outside fire escape. One man immediately lost his footing and fell to the courtyard below. The courtyard, which was really a light and air shaft, offered no way out at ground level. The fire escape descended only as far as the second floor, and at the sixth floor, the group had to smash windows to reenter the building. About 20 people reached safety in this way.

Most of the eighth-floor employees stampeded toward the stairwells. Those closest to the fire pressed into the narrow Greene Street stairwell. A larger group retreated away from the flames toward the Washington Place stairs, where the door was locked. People pressed against the door, which opened inward. Machinist Louis Brown eventually was able to force open the door, and with the smoke and heat becoming unbearable, people poured into the stairwell.



Before the cutters could put out the blaze, patterns that were hanging on long wires began to burn. The fire was ahead of them and spreading rapidly.

Sounding the alarm

While the cutters were fighting the fire, Dinah Lifschitz tried to alert those on the ninth and tenth floors. Mary Alter, a substitute switchboard operator, answered the phone on the tenth floor. She did not

understand at first, but then distinctly heard Lifschitz repeat: "There is a fire!"

Alter immediately notified the bookkeeper on the tenth floor, who called the fire department. She then notified Triangle owners Max Blanck and Isaac Harris, and went to look for the tenth-floor watchman. While Alter alerted tenth-floor occupants, Lifschitz remained on the line, urgently demanding to be connected to the ninth floor, which could be done only through the tenth-floor switchboard. Lifschitz never got through to the ninth floor.

While Lifschitz was trying to alert the ninth floor, Bernstein rejoined her. The eighth floor was dark with smoke. The heat was unbearable, and flames lapped out the windows. The two made their way to the Greene Street stairwell, but as Lifschitz descended, Bernstein went up, remembering relatives on the ninth and tenth floors. When he got to the ninth floor, the fire had spread to that floor near the stairwell door, so he continued upward to the tenth floor.

More alarms are struck

When the first windows broke, people on the street looked up after hearing what sounded like a loud puff. John Mooney, a passerby, turned in the alarm from a box on Greene Street at 4:45 p.m. Just 30 seconds later, the department received the call from the Triangle's bookkeeper on the tenth floor, as well as another report.

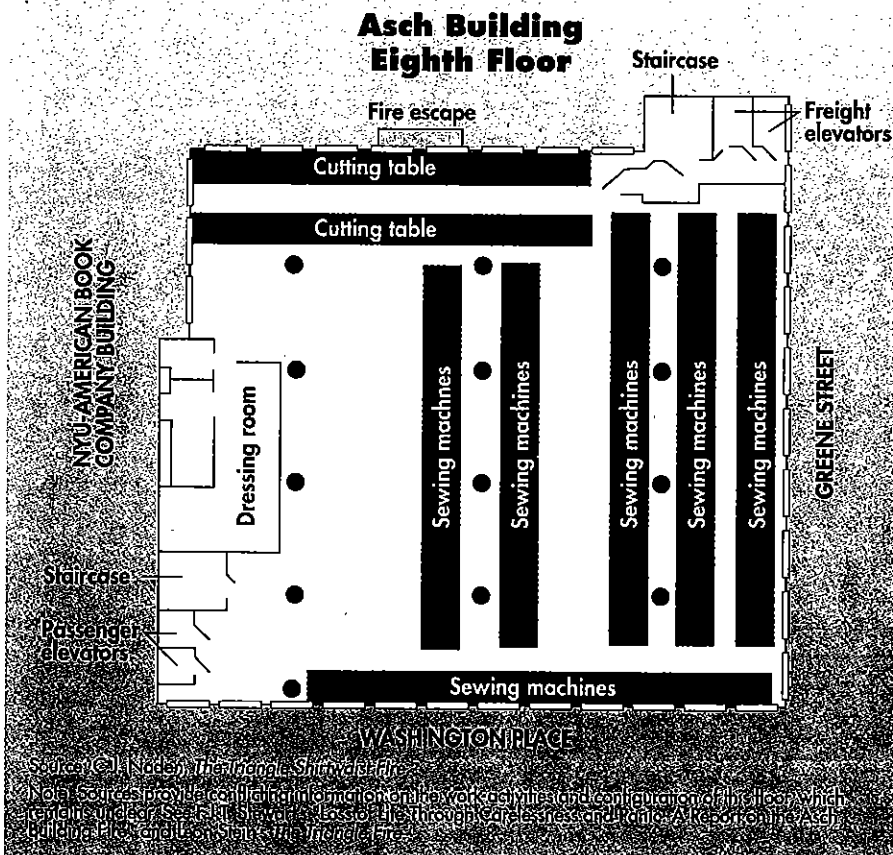
Mounted patrolman James Meehan saw the first windows breaking. He jumped from his horse and ran up the Washington Street stairs. At the seventh floor, Meehan encountered a pile-up of people in the stairwell. He quickly got the evacuation restarted.

At the eighth floor, he met machinist Brown, and together they rescued two women who were preparing to jump from windows. Meehan and Brown got them started down the stairs. Returning to the window, Meehan heard the crowd below yelling to him not to jump. He knew it was time to get out. Meehan and Brown crawled to the stairwell on their hands and knees and made their way to safety.

The first-arriving fire department unit was a horse-drawn pumper from Engine Company 18. Captain Howard Ruch later reported that on arrival, fire was showing from upper windows and that people had started to jump from windows and ledges.

Engine Company 72 and Hook and Ladder Company 20 arrived just seconds later. Fire fighters stretched hoses up the stairwells. At the sixth floor, they disconnected the standpipe hose and attached their own. At the eighth-floor landing, they crawled on their stomachs with

FIGURE 1



Source: © Alan Noshay, *The Triangle Shiftworkers*, pp. 10-11.

Note: Sources provide conflicting information on the layout, position, and configuration of the floor, which remains unclear. See the following boxes to follow through the fire escape and into the Asch Building from the east side of the Triangle.

their hoses into an inferno.

Battalion Chief Edward Worth arrived early, and within 1 minute ordered a second alarm. Third and fourth alarms were sounded at 4:55 p.m. and 5:10 p.m. Eventually, 35 apparatus responded to the scene.

Company 20's hook and ladder was one of the tallest in the department, but it reached only to the sixth floor when fully extended. As New York City Fire Chief Edward Croker arrived, those trapped in the building were jumping. Life nets were opened, but people jumping two and three at a time ripped the nets to shreds.

To the roof

On the tenth floor, owners Blanck and Harris had the first indication there was a problem when Mary Alter informed them that "there [was] a little fire on the eighth floor." They realized it was more than a little fire as smoke obscured the windows and began to fill the tenth floor.

Thinking that workers on the ninth floor might be unaware of the danger, shipping manager Edward Markowitz ran down the Greene Street stairs. Employees there had become aware of the danger just seconds before he arrived. Markowitz ordered everyone to evacuate in an orderly fashion as they pushed toward the elevators and the stairs. After yelling to the ninth-floor watchman to lead some of the women to the fire escape, Markowitz returned to the tenth floor when he realized that he had not secured his books in the shipping department.

The elevator was still running to the tenth floor when Markowitz returned. People were running in all directions, and it was clear that they had to evacuate. Owner Blanck stood with his daughters, ages 5 and 12, who had joined him at the Triangle to go shopping at the end of the day. They were waiting for an elevator, but the cars were delayed, and it was uncertain they would return. They had to get out some other way.

Bernstein emerged on the tenth floor from the Greene Street stairwell. He quickly confirmed that going down the stairs was out of the question. Their only option was to go to the roof.

When they reached the roof by the Greene Street stairs, the smoke and flames had intensified and seemed to be coming from all directions. On the Washington Place side of the building, the adjacent American Book Company building was 15 feet higher than the Asch Building (see figure 4). A skylight above the Asch Building's passenger elevators reduced this distance. On the Greene Street side, the New York University (NYU) Building was 13 feet higher than the fire building, but a skylight above the Asch Building's freight elevators reduced

this distance, too.

In the NYU building, Professor Sommer's law class on the tenth floor and Professor Parson's horticulture class on the ninth floor came to an abrupt halt when smoke indicated trouble in the adjacent Asch Building. Students saw trapped workers jamming the fire escape and flames blowing out the windows. Realizing the plight of those on the roof, Professor Sommer and a handful of students went to the roof to help.

The students found ladders on the roof that painters had left earlier in the week. Lowering them to the elevator structures on both the Washington Place and Greene Street sides of the Asch Building and using others to straddle the skylights, everyone on the roof was rescued.

Nowhere to run

Despite the chaos, confusion, and panic, most of the workers on the eighth and tenth floors escaped. Their coworkers on the ninth floor, however, were not as fortunate.

Saturday was payday, and Anna Gullo, the forewoman on the ninth floor, had finished distributing pay envelopes. She went back to her desk near the freight elevators and rang the quitting bell.

Max Hochfield was the first worker from the ninth floor to become aware of the fire. He hung his coat in a quiet corner

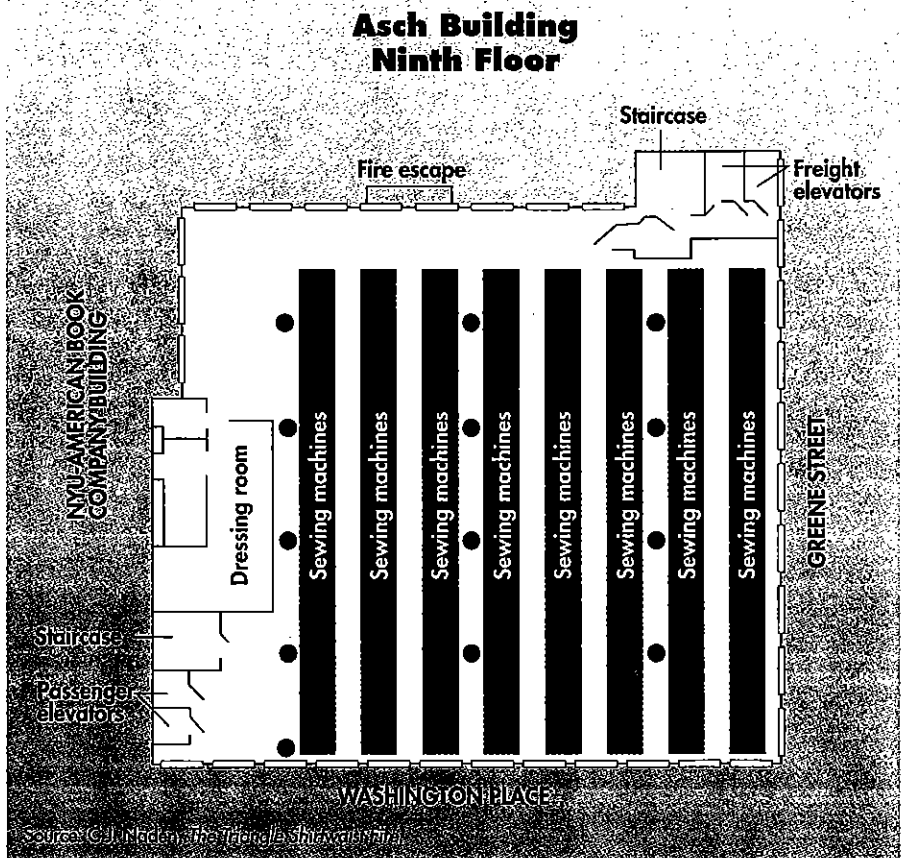
near the Greene Street stairwell. As Anna Gullo rang the quitting bell, he was already entering the stairwell. He caught an unexpected glimpse of the fire as he passed the eighth floor. At the seventh-floor stairwell window, he saw people scurrying down the outside fire escape. As the seriousness of the situation became apparent to him, he turned to go back. His sister was on the ninth floor. However, a fire fighter ordered him to continue downward and get out of the narrow stairwell.

Those on the ninth floor were unaware that the floor below had become an inferno until smoke and flames were seen billowing outside the large floor-to-ceiling windows. At about the same time, the windows began to fail. Panic ensued.

Two groups of people surged toward each of the remote stairs. About 150 people fought to get past the narrow Greene Street partition into the stairwell. More than 100 made it past the eighth floor before intense fire blocked the stairwell. The remainder of the group was trapped.

The second group rushed toward the Washington Place stairs. But the stairwell door was locked, just as it was on the eighth floor, and no one was able to open it. Some went back toward the Greene Street stairs, others went to the windows near the fire escape, but most pushed

FIGURE 2



toward the two nearby passenger elevators.

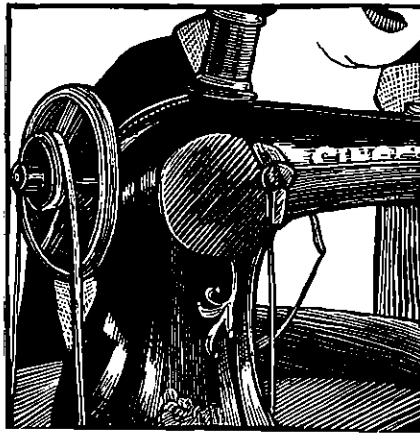
Sixteen-year-old belt boy Abe Gordon was one of the first to reach the fire escape. Gordon and several others had to push open the large metal shutters that covered the windows to the fire escape. At the eighth floor, a metal shutter blocked the fire escape's horizontal gangway completely. The shutter had buckled from the heat and was locked in this position.

Gordon and the others climbed over the railings, through the billowing smoke and heat, and around the shutter. When they reached the sixth floor, they entered through windows broken earlier by the workers who had escaped from the eighth floor.

From the sixth-floor window, Gordon heard a grinding noise above him. The fire escape was collapsing. Above the eighth floor, where the shutter was stuck, the fire escape was full of people. Some had gone up to the tenth floor, found no escape, and returned. Overloaded and weakened from the heat, the fire escape gave way. Flaming bodies plunged to the courtyard.

Last car to the lobby

For those who remained on the ninth floor by the locked Washington Place stairs, the passenger elevators repre-



Overloaded and weakened from the heat, the fire escape gave way. Flaming bodies plunged to the courtyard.

sented the last hope of survival. The two elevator operators, Gasper Mortillalo and Joseph Zito, had been waiting in the lobby for the Triangle to close for the day. It was the last company in the building still open for business.

Then the bells in both cars started ringing. On their first trip to the eighth floor, they discovered the fire. Because

occupants of the eighth and tenth floors learned of the fire first, they received the services of the elevators first. By the time the elevators responded to the ninth floor, they were being filled with escaping workers and smoke. The passenger elevators, measuring 4 feet, 9 inches by 5 feet, 9 inches, were designed to carry 10 people. On the last several trips, they carried at least twice that number.

"They pulled my hair, dived on top of me, climbed on the roof, and packed themselves in on top of each other," Mortillalo later recounted.

The flames had spread from the northeast corner of the building, forcing those at the Greene Street stairs to the Washington Place windows. Similarly, the desperate situation of those near the Washington Place stairs forced some to the windows, while others screamed and pounded on the closed stairwell door.

Some men were able to force open the elevator shaft doors. Samuel Lavine later described those final moments:

"The elevator was at the bottom of the shaft, and I felt that my only hope was to slide down the cable. I seized it, and had slid down a little way when a girl jumped on my back and loosened my hold, so that I shot down to the bottom of the shaft at a terrific speed, and landed on my back on the top of the elevator.

"The girl who had jumped on me fell and was killed and several other girls who had also jumped down the shaft were dead on top of the elevator. Although I was badly shaken up and bruised I was able to make my way outside, where I collapsed and was taken to the hospital."

On his last trip, Mortillalo could only get as far as the seventh floor; the elevator tracks had become warped from the heat. As the elevator returned to the lobby, he heard the thump of bodies landing on the roof. At the ground-floor level, the roof of Zito's elevator buckled, and the elevator was unable to move because of the bodies piled on the roof as people leaped into the elevator shaft.

Asch to ashes, dust to dust

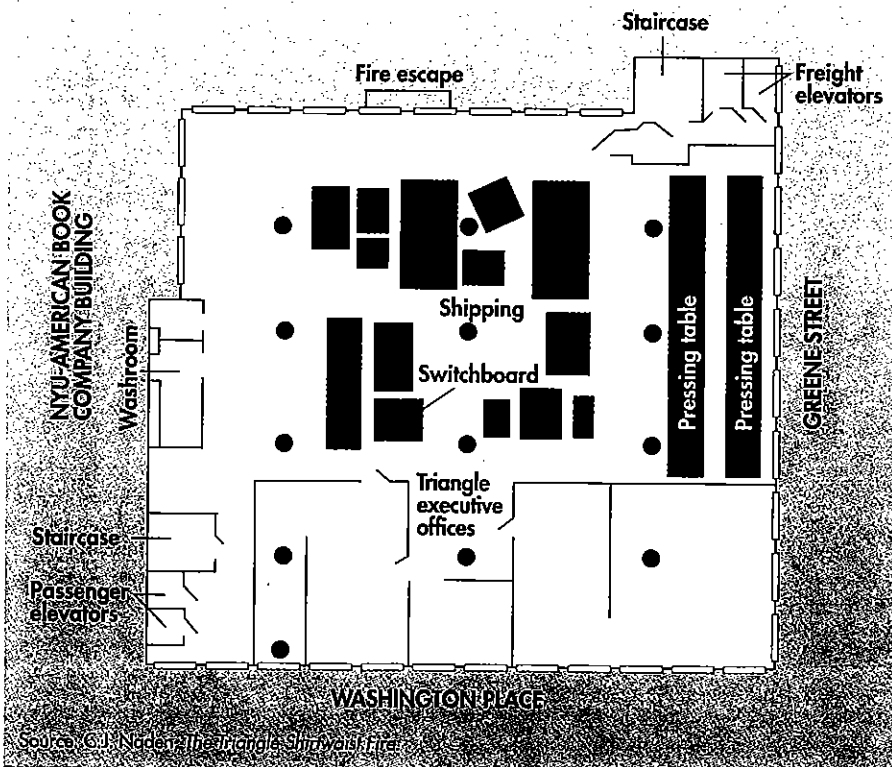
Fire fighters were entering the building as workers poured down the stairs and out of elevators. Because of falling bodies, police and fire fighters kept everyone from leaving the building's ground floor for a brief time.

Just after 5:00 p.m., a young girl jumped from the ninth floor and was caught on an obstruction part of the way down the building. A crowd of about 10,000 onlookers watched her plummet to her death, her clothes on fire. It soon became clear that she was the last to jump. More than 60 people lay in the street.

Within 30 minutes, the fire was under

FIGURE 3

Asch Building Tenth Floor



control. Led by Chief Croker, fire fighters began searching the top floors some time after 6:00 p.m. On the ninth floor, incinerated victims were found huddled together.

The crowd in the street grew. Many were simply curious, but others were relatives and friends of Triangle employees, searching desperately for loved ones. People pushed against the police lines and demanded to be let through. Authorities tried to reinforce the lines that formed a one-half-mile circle around the Asch Building.

Suddenly, the crowd surged forward, breaking through the lines and sweeping the police away. Men and women rushed to the tarpaulin-covered bodies. After re-establishing their lines, the police prepared for another breakthrough, which came at 6:45 p.m. This time, club-wielding police turned the crowd back.

After 8:00 p.m., Battalion Chief Worth and a group of fire fighters on the ground floor heard faint cries for help coming from the basement. Fire fighters sloshed through hip-deep water and found Herman Meshel behind the locked door of the southwest corner elevator shaft.

Immersed to his neck in frigid water that was cascading from above, Meshel had jumped from the eighth floor down the elevator cable when the elevator was on the floor above. Losing his hold, he had plummeted down the shaft. When he regained consciousness, he was trapped in the rising water. While his coworkers were dying from heat and flames, Meshel was freezing and close to drowning for nearly 4 hours.

Meshel was the last survivor removed from the building. At 11:30 p.m., Chief Croker informed the press that his men had searched the entire building and that all victims had been removed. However, when the basement was finally emptied of water just before dawn, two additional victims were found behind the boiler. The women had crashed through the glass blocks on the Greene Street sidewalk after jumping from the building. Finally, everyone was out of the building.

Misery Lane

When Sunday dawned, people had gathered around the Asch Building behind the police blockades. Some had trudged all night between the morgue and the nearby Mercer Street police station, trying to learn the fate of missing loved ones. Returning to the Asch Building, they were joined by throngs of the curious. Deputy Police Commissioner Driscoll estimated that more than 50,000 people came to the site.

Not long after the fire had been extinguished, it became clear that the city morgue could not handle the large number of bodies. All were transported to the

26th Street pier, which had housed the hundreds who had died 7 years earlier when the *General Slocum* excursion boat burned in the East River. Following that tragedy, people referred to the pier as Misery Lane.

Identifying the victims was very difficult. Of the 136 victims transported to the pier, 56 were burned beyond recognition. At midnight on Saturday, relatives and friends of victims were permitted to view the dead in an attempt to identify them. From the time the doors opened until 7:00 p.m. on Sunday, an estimated 100,000 people walked among the coffins.

There were many funerals during the week following the fire. Seven bodies remained unidentified, and a funeral parade was planned for April 5. Many in the city were bitter, and a mass funeral expressed both the sorrow and the outrage of citizens. An estimated 400,000 people attended the event, despite a torrential downpour.

In Evergreen Cemetery, eight coffins were placed in a 15-foot-long grave. Seven of them contained the remains of victims who were known as numbers 46, 50, 61, 95, 103, 115, and 127. The eighth coffin, which was unmarked, contained additional unidentified remains.

In the days following the fire, several hospitalized victims died of severe inju-

ries, bringing the final death toll to 146.

Public-spirited citizens contributed to a relief effort organized by the Red Cross Emergency Relief Committee. The fund totaling \$120,000—a huge sum for the time—allowed the committee to help relatives of the victims who lived around the world. The aim of the effort was not only to reimburse financial losses, but also to restore the standard of living of both the survivors and the dependents of those killed.

The investigation

After the fire, public officials were quick to defend themselves and promise action. But who was to blame?

The governor blamed the Department of Buildings. The district attorney insisted the State Labor Department was responsible for fire safety regulations for factories. The Tenement House Department, the Water Supply Department, the police, and others were blamed for having the power to order fire precautions in factories, but failing to do so.

The burgeoning unions were outspoken after the fire. In 1910, the Triangle had gained national attention as the site of a labor dispute that had led to a citywide strike by garment workers. Despite the gains made by the union, the Triangle's owners broke the union in

Words of Warning

On December 28, 1910, 3 months before the Triangle Shirtwaist fire, New York City Fire Chief Edward Croker appeared before the New York State Assembly to provide testimony to the Investigating Committee on Corrupt Practices and Insurance Companies Other Than Life.

Judge M. Linn Bruce presided. The following exchange indicates that the fire department was aware of its potential limitations if called on to respond to fires in tall city buildings:

Bruce: How can you successfully combat a fire now?

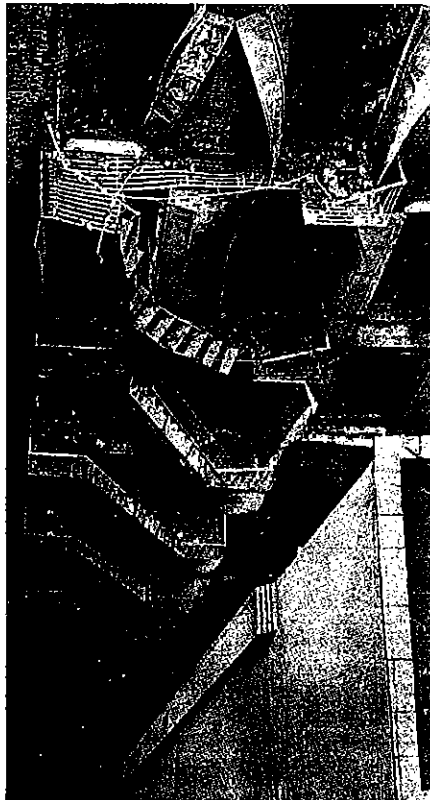
Croker: Not over 85 feet.

Bruce: That would be how many stories of an ordinary building?

Croker: About 7 [stories].

Bruce: Is this a serious danger?

Croker: I think if you want to go into the so-called workshops which are along Fifth Avenue and west of Broadway and east of Sixth Avenue—12-, 14-, or 15-story buildings they call workshops—you will find it very interesting to see the number of people in one of these buildings with absolutely not one fire protection, without any means of escape in case of fire.



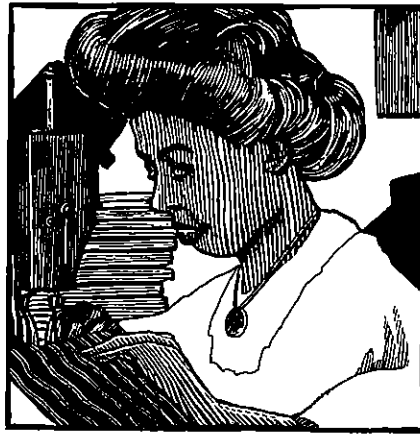
Metal shutters covered the windows to the fire escape leading to the rear courtyard. When the fire escape collapsed, victims plunged to the ground below.

their shop and the Triangle workers gained nothing. The gains made by the unions included improvements in sanitary and safety conditions. The outrage of many fostered the belief that those who died were martyrs in a much bigger conflict.

Triangle owners Blanck and Harris disclaimed any responsibility, maintaining that it wasn't their fault that building regulations were inadequate. The day following the fire, Albert Ludwig, chief inspector and deputy superintendent of the New York Building Department, after inspecting the Asch Building, said: "This building could be worse and come within the requirements of the law."

The fire escape and other building features—such as the building's automatic, thermostat-equipped fire alarm system—met or exceeded requirements. Each floor had dozens of water-filled pails, and each stairwell contained 50 feet of 2½-inch hose attached to a standpipe system supplied by a 2,000-gallon roof tank. The standpipe was supplemented by an outside fire department connection. The basement and sub-basement were equipped with perforated pipes supplied by an outside fire department siamese connection.

The Asch Building was considered fireproof because its construction would not contribute to a sweeping conflagration, the kind of fire that occurred in large



Some had trudged all night between the morgue and the nearby Mercer Street police station, trying to learn the fate of missing loved ones.

cities at that time. The primary concern of officials was to preserve property, and in this regard the Asch Building was a model. In reality, the Asch Building was a death trap.

The fire risks of loft factories were no surprise to some. One outspoken critic

was Chief Croker. On various occasions before the fire, Croker publicly stated that his department could fight a fire successfully only up to seven floors. Croker wasted no time in answering the question of whether such a tragedy could occur again. In a statement to the *New York Tribune* on the Monday after the fire, he said:

"There may be at any time a repetition of this disaster with its appalling loss of life in any of the great office buildings employing thousands of persons, mostly girls. There are no fire escapes on those buildings and no means of egress in case of fire. It is impossible to fight a fire 20 or 30 stories in the air, and the life nets will not hold a body shooting down 125 feet. I recommended... fire escapes on all office buildings, but I was told it would spoil the city beautiful."

The city had awakened to an immense and unacceptable danger. In late 1909, the Women's Trade Union League had estimated that more than 600,000 workers were employed in 30,000 factories in the New York City area; half that number worked above the seventh floor. Then came the Triangle disaster. In the aftermath of the fire, the complacency regarding fire safety was evident. Not one law addressing fire safety in buildings or factories had been enacted in the preceding decade.

In search of justice

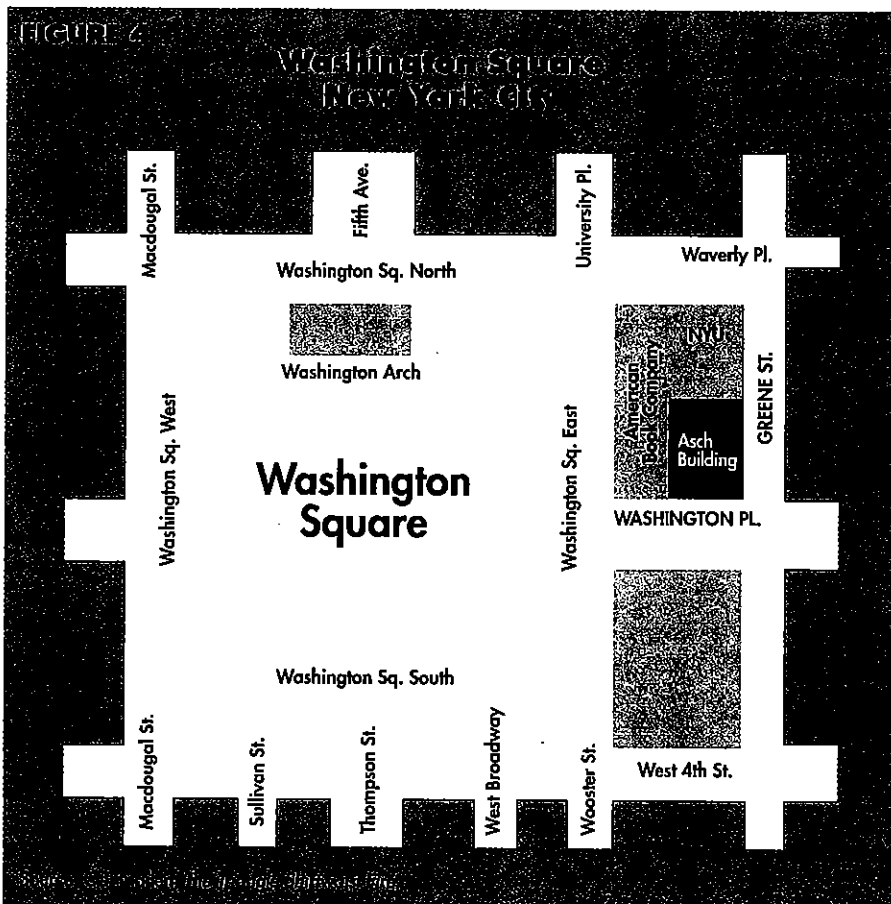
On April 11, 1911, Blanck and Harris were indicted for manslaughter in the death of one victim, Margaret Schwartz, who had died on the ninth floor near the Washington Place stairs. The indictments charged that the stairwell door was locked, preventing her escape.

The trial, which began on December 11, 1911, lasted a little more than 3 weeks. During the proceedings, 155 witnesses were called. Testimony centered on three main questions: Was the door locked at the time of the fire? Did the victim die as a direct result of the door being locked? Did the defendants know the door was locked? The additional issue of the stairwell door opening inward also was raised.

On December 27, the trial concluded. When the jury returned its verdict of not guilty after only 1 hour and 50 minutes, Harris and Blanck needed a police escort to get through the crowd outside the court building. People were enraged and felt that justice had not been done. The bitterness that had been blunted in the 9 months since the fire was rekindled immediately. The outrage over the verdict became a catalyst for reform.

Change and the New Deal

At the first protest, held the day after the Triangle fire at the headquarters of the



Women's Trade Union League, community leaders called for the creation of a committee to improve safety in the work place. Within 1 week, the Committee on Safety was established.

In response to the work of the Committee on Safety and other groups, New York Governor John Dix signed legislation on June 30, 1911, that created the New York State Factory Investigating Commission. Nine community leaders were chosen to serve on the commission.

Although the purpose of the Factory Investigating Commission was to report on conditions in New York factories by February 15, 1912, its work took more than 2½ years and included an examination of sanitary and unsafe working conditions, in addition to fire hazards. The commission's 4-year term marked the beginning of a period of remedial factory legislation in the state, during which 36 laws were added to the labor code.

On the first day of public hearings, the commission's chief counsel, Abram Elkus, outlined a new purpose in American life. Society was reappraising its values:

"It is the duty of the state to safeguard the worker not only against the occasional accidents, but also the daily inci-

dents of industry; not only against the accidents which are extraordinary, but also against the incidents which are the ordinary occurrences of industrial life."

Commission member Frances Perkins had witnessed the fire's victims jumping from the Asch Building. She carried the memory with her on a campaign of social reform. When President Franklin Delano Roosevelt appointed Perkins U.S. secretary of labor some 20 years later, Perkins spoke of the challenge confronting America, one requiring a shift in social responsibilities. For many, that shift could be traced to a single event:

"We had in the election of Franklin Roosevelt the beginning of what has come to be called a New Deal for the United States," Perkins said. "But it was based really upon the experiences that we had had in New York state and upon the sacrifices of those who, we faithfully remember with affection and respect, died in that terrible fire on March 25, 1911. They did not die in vain and we will never forget them."

The Triangle fire and safety to life

Two months after the Triangle fire, the NFPA held its 15th Annual Meeting in New York City from May 23 to 25, 1911. The Triangle fire was still fresh in the minds of all present.

R.H. Newbern, superintendent of insurance at the Pennsylvania Railroad Company, was to make a technical presentation at the meeting. His topic was private fire brigades, but he supplemented his presentation to discuss occupant fire drills. The title of his presentation was "Private Fire Departments and Fire Drills."

The timeliness of Newbern's paper cannot be overstated. NFPA members had become sensitive to the issue of safety to life in buildings because of a series of tragic building fires: the Rhoads' Opera House fire in Boyertown, Pennsylvania, in 1903; the Iroquois Theatre fire in Chicago in the same year; and the Lakeview Grammar School fire in Colliwood, Ohio, in 1908. Of primary inter-

The Garment Industry and Sweatshops

When Massachusetts inventor Elias Howe patented a device called the "sewing machine" in 1846, most clothes were made by hand at home.

Although an innovation, Howe's new machine had to be cranked by hand, a drawback for the operator who then had only one hand free to work. In 1851, Issac Merrit Singer of New York patented a machine that was operated by a foot pedal, which left the operator's hands free.

Singer's machine made possible the clothing industry we know today. In the early days of the industry, most material was sewn at home by female employees from cloth cut by dealers. As demand grew, the industry expanded into factories. By 1860, there were nearly 200 factories, most of them in the industrial centers of New York and Pennsylvania.

Demand for manufactured clothing generated a need for labor. For immigrants traveling to America in search of a better life, the garment industry offered needed employment.

A typical worker in a garment



As the demand for manufactured clothing grew, the garment industry expanded into factories. Workers toiled long hours under difficult conditions.

factory earned \$1 to \$3 a week. Workers toiled long hours, often 7 days a week. The lighting was bad, and the ventilation was poor, giving rise to a new term in the American vocabulary: the sweatshop. Although sweatshops did not present the hazards of other occupations, such as sudden death or maiming, their hazards included exhaustion and starvation.

The American labor movement

grew out of the unfair and unsafe working conditions of the time. By 1900, about 3½ percent of the work force was unionized. In the same year, the International Ladies' Garment Workers Union (ILGWU) was founded and boasted a membership of more than 2,000 workers. However, progress was made slowly. By 1911, public apathy resulted in unsafe and unsanitary working conditions for most clothing workers.

est was the segment of Newbern's paper on fire drills. It offered a powerful tool for life safety, not only because it would train building occupants, but also because it would demonstrate any inadequacies of a building's exits.

Moreover, Newbern wrote and presented the paper as a detailed technical specification. This was of paramount importance, since it allowed NFPA members to convert the paper into a pamphlet for public distribution.

The NFPA Executive Committee voted to transfer the responsibility for Newbern's presentation to the newly retitled Committee on Private Fire Departments and Fire Drills. The committee previously had focused only on private fire department organization.

One year later, at the 16th NFPA Annual Meeting, the Committee on Private Fire Departments and Fire Drills presented two pamphlets for adoption, both derived from Newbern's paper. The second part of his paper was published in 1912 as "Suggestions for the Organization and Execution of Fire Drills in Factories, Schools, Department Stores and Theatres."

At the NFPA's 17th Annual Meeting, held in New York City in May 1913, Frances Perkins, the executive secretary of New York's Factory Investigating Commission, was the keynote speaker.

In her speech, "The Social and Human Cost of Fire," Perkins appealed for life safety measures in factories and loft buildings, more control of smoking in hazardous areas, better exit facilities, and fire drills. But more important, she challenged the NFPA to address these issues, using the far-reaching resources of the association:

"An organization like yours, with its branches in every state in the country, has enormous possibilities for carrying on in every industrial community a work similar to the work which the Committee on Safety has done here."

The combined effect of Newbern's and Perkins' presentations on the NFPA was profound. A new era in fire protection began. The focus—previously on large fires that destroyed entire cities—was shifting to a greater appreciation of and accountability for safety to life.

Perkins' words served as a catalyst. At the 18th NFPA Annual Meeting in Chicago, H. Walter Forster reported on the founding of the NFPA Committee on Safety to Life:

"...the particular importance which the subject of safety to life now occupies in the public mind, and believing that our association could improve its efficiency by devoting particular attention to certain phases of the subject, voted on June 23, 1913, to create a Committee on Safety to Life..."



Within 30 minutes, the fire was under control. After 6:00 p.m., fire fighters began searching the top floors. They found incinerated victims on the ninth floor.

Epitaph

Today, New York University occupies the entire block that contained the Asch Building. On the 50th anniversary of the Triangle tragedy in 1961, the International Ladies' Garment Workers Union placed a bronze plaque on the building's northwest corner at Greene Street and Washington Place to commemorate those who lost their lives. It reads in part: "...Out of their martyrdom came new concepts of social responsibility and labor legislation that have helped make American working conditions the finest in the world."

The reforms that resulted from the Triangle Shirtwaist Company fire affect many aspects of our lives. Perhaps the most important aspect of the Triangle fire was that it forced society to awaken from a period of denial and to acknowledge hazards it had ignored. In the words of Frances Perkins: "The Triangle fire was a torch that lighted up the whole industrial scene."

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2. O.L. Bettman, *The Good Old Days—They Were Terrible!*, (New York: Random House, 1974).

3. "Blame Shifted on All Sides for Fire Horror," *The New York Times*, March 28, 1911, p. 1.

4. Percy Bugbee, *Men Against Fire*, (Quincy, Mass.: NFPA, 1971).

5. P. Bugbee and A.E. Cote, *Principles of Fire Protection*, (Quincy, Mass.: NFPA, 1988).

6. W. Cahn, *A Pictorial History of American Labor*, (New York: Crown Publishers, 1972).

7. H. Clevely, *Famous Fires*, (New York: The John Day Co., 1957), p. 46.

8. "Fire in Factory Kills 148; Girls Leap to Their Death," *Boston Sunday Globe*, March 26, 1911, p. 1.

9. "Half of New York Fire Dead May Remain Unidentified," *Boston Daily Globe*, March 27, 1911, p. 1.

10. "Locked in Factory, the Survivors Say, When Fire Started that Cost 141 Lives," *The New York Times*, March 27, 1911, p. 1.

11. "More Than 140 Die as Flames Sweep Through Three Stories of Factory Building in Washington Place," *New York Tribune*, March 28, 1911, p. 1.

12. "Much Investigation To Little Purpose," *Boston Daily Globe*, March 28, 1911, p. 1.

13. C.J. Naden, *The Triangle Shirtwaist Fire, March 25, 1911*, (New York: Franklin Watts, 1971).

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16. "Outside Stairs for Fire Exits," NFPA, Boston, Mass., 1916.

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22. "Seek to Fix Blame for Disaster and to Avert a Worse One," *New York Tribune*, March 28, 1911, p. 1.

23. L. Stein, *The Triangle Fire*, (Philadelphia: J.B. Lippincott, 1962).

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25. "Suggestions for the Organization and Execution of Exit Drills in Factories, Schools, Department Stores and Theatres," NFPA, Boston, Mass., 1912.

26. *The Readers Digest Family Encyclopedia of American History*, Reader's Digest Association: Pleasantville, N.Y., 1975.

27. "Toilers Herded in Death Trap," *Boston Daily Globe*, March 27, 1911, p. 1.

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