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REPORT

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BOSTON, MASSACHUSETTS

OCTOBER 1, 1964.

William A. Terrenzi Chicf of Department Boston Fire Department January 14, 1965.

REPORT OF TRUMBULL STREET FIRE BOSTON, MASSACHUSETTS

The Fire: -- Thursday, October 1, 1964, Box Alarm 1671, Five Alarms, Shawmut Avenue and West Brookline Streets.

With the striking of this Box, first alarm companies responded automatically to the urgency of an alarm of fire. This fire was first noticed by a person on Newland Street, passing the corner of Trumbull Street approximately 150 yards from the scene, who saw flames leaping across a narrow alley and a red glow staining the sky. First due engine and ladder companies arriving at Box 1671 were directed to the fire which was about one block away from the box which was struck. The eyes of all firefighters on the apparatus became riveted to the glow of fire in the sky and they knew they were going to "work."

To reach the fire scene, Engine Company 3 and Ladder Company 3 threaded their way up West Brookline Street, turned left onto Newland Street, to the corner of Trumbull Street at which point the officer dismounted to hurry down Trumbull Street. The apparatus continued to West Canton Street, turned left onto Ivanhoe Street which marks the other end of Trumbull Street and utilizing the area of an open lot turned left onto Trumbull Street. The Ladder Truck came to a stop beyond the fire building and the engine company stopped at the corner of Ivanhoe Street. Big lines (2½") were started from Ivanhoe Street.

Upon the sounding of Box 1671, the District Fire Chief of Districk 4, out on a call to 192 Boylston Street turned command at that location over to a junior officer and responded to Box 1671. The balance of the first Alarm assignment, two more engine companies and another ladder company were also responding to the Box. Upon arrival at the fire scene, Fire Lieutenant John Campbell of Ladder Co. 3 evaluated existing fire conditions and at 12:36 p.m. notified the Fire Alarm Office by radio of a "Working Fire." In conformance with pre-arranged response pattern, another engine company and the Rescue Company were dispatched to the fire.

District Fire Chief John McCarthy, District 4, upon his arrival at 12:37 a.m., viewed the existing situation and ordered a SECOND ALARM sounded at 12:38 a.m. He hurriedly appraised the existing exposures and noted that there was communication between the fire building, 36 Trumbull Street, and its front companion part, 119-125 West Brookline Street at the cellar, street and seconf floor levels. Forcible entry on a wide double hung loading door and an entrance door to its right which led to an ascending stairway had been accomplished by "open-up" men from Ladder Companies 3 and 13. Personnel from these companies were also raising ladders to the building front and to adjoining roofs. Ladder Co. 3's aerial was raised to

the roof of a four story frame building to the left of the fire building. Engine Co. 3, the first arriving engine company had advanced a 2½" line into the fire building at the stairway entrance and was attempting to make the second floor via the stairway. The volume of fire and the intensity of the heat evolved was extreme and this company retreated to the base of the stairs. Deputy Fire Chief Frederick Clauss, Division ONE, briefed on his arrival, ordered a THIRD ALARM. This was at 12:42 a.m.

Deputy Chief Clauss noted a charged line leading into the building (Engine Co. 3). He followed the line inside and ordered the men manning it to leave the building. He then took position in the middle of the street to direct operations, Engine Company 3 had meanwhile started to back the line from the building. At 12:45 a.m., the Deputy Chief ordered a FOURTH ALARM for now the structure was visibly fully involved with the exception of the street floor, and fire was breaking through the roof. Engine Co. 22, utilizing Ladder Co, 3's aerial, was advancing a line to the roof of the four-story frame building adjacent to the left side of the fire building. Engine Co. 7, utilizing the first 35-foot extension ladder thrown by Ladder Co. 3, had climbed to the roof of a two-story building adjoining on the right side. This company carried its line to the second floor roof and crossed over from this adjoining building to the roof which covered the communicating structure joining the rear of 36 Trumbull Street to 125 West Brookline Street rear. A 20-foot roof ladder was used as a bridge to accomplish this (See Photograph A.).

Positioned at the rear of the fire building, Engine Co. 7 operated from the rear toward the front of the fire building in an area of heavy involvement. This company was joined shortly thereafter by Engine Co. 21 and by the "Working Fire" company, Engine 43, which had advanced a line from West Brookline Street through the West Brookline Street building to the rear of the fire building via the communicating roof.

With the ordering of men from the building, ladder companies continued with the placement of ladders against the building front. Ladder Co. 3 raised a second 35' extension ladder to the balcony fire escape at the third floor level; Ladder Co. 4's 35' extension ladder was raised to the right directly parallel to the same balcony fire escape; Ladder Co. 3's 25' roof ladder was raised to the second floor window to the right of the balcony fire escape at the second floor. Engine companies on the Trumbull Street side, the fire front, prepared to extend lines over ladders. Engine 3's line which had been backed out of the building required lengthening and the nozzle man was directed to get another 50-foot length of hose from the hose wagon so that it could be pieced in. Engine 24 had laid a line of hose of sufficient length and commenced to stretch it over Ladder 3's 35' extension to the third floor balcony fire escape.

In keeping with procedure, the nozzle man, Firefighter Enrich of Engine 24 started up the ladder followed by Fire Lieutenant McCorkle and Firefighter Francis Murphy at proper intervals. With the return of Engine 3's nozzle man to the wagon for bose, Firefighter Robert Clougherty moved up to nozzle position panding the nozzle man's return. (It is entirely possible that the civilian victim, Andrew Sheehan, a free-lance photographer, was in the immediate area of Engine 3's operations.)

Firefighter Sheedy, Ladder 4, approached this company's 35' ladder carrying dog chains. Fire Lieutenant John Geswell intercepted Sheedy and taking the chains from him indicated he would dog the ladder. The Lieutenant mounted the ladder, and it is reported that shortly thereafter he cautioned Hoseman Enrich on the parallel 35' extension ladder to his left to be careful because that ladder had not been dogged. Firefighter Enrici upon reaching the third floor blacony fire escape secured his line of hose to the balcony fire escape with a rope hose line. Ladder Sheedy reamined in the area of the base of the ladder while Lieutenant Geswell mounted the ladder. Members of Engine Co. 37 on orders of the Deputy Chief had stretched a 2½" line assisted by members of Ladder Co. 15 and were awaiting several feet back from the base of Ladder 4's 35's ladder securing (dogging) operation to be completed. Trumbull Street is approximately 12 feet in width with a vacant unsecured brick building on the opposite side of the street from the fire building.

The Incident. The fire had darkened, smoke enshrouded the upper portion of the fire building. News photographers, from experience, realized the fire was fast losing photographic news value and started to drift from the scene. Two photographers servicing a national news service started walking backward away from the fire scene - cameras not held at the ready position. Only the lower portion of the building's fire front clearly stood out. Firefighters stood grouped around the foot of ladders extended into the obscuring smoke, the Deputy Chiet stood near the ladders directing operations, and as the smoke lifted and eddied, glimpses of men working on ladders were caught - a kinetic normalcy to the scene, (See Photograph 3). Suddenly, before the astonished and uncomprehending eyes of the photographers, chaos broke loose. Firefighters in the vicinity of the ladders were strewn on the ground, bricks, metal, wire screening, mortar interwoven about them, a whitecoated figure encircled by bricks, attempting to regain his footing, broken ladder rails and rungs at grotesquely jagged angles.... Shock and inertia, momentary cessation of movement by personnel, disbelief. The return to comprehension that disaster had struck dissipated inertia; firefighters on its fringe surged forward to assist and to rescue those had become victims of a falling wall, (See Photograph C).

The Resque. At 12:52 a.m., Car 4R, Boston Police Legartment, called into the "Turret" - "The wall let go with firemen on it." Deputy Police Superintendent Mulloney issued an immediate order, "All Districts and ambulances go to West Canton and Trumbull - from Deputy Mulloney." Firefighters who had been driven back by the falling wall now darted back into the perimeter of danger and started removing bricks from the partially covered victims (See Photograph D). Three firefighters succeeded in greeing a victim sufficiently to permit his being dragged from the area; a policeman helped a stunned Deputy Chief to his feet with the aid of Fire Captain Wisentaner. The Deputy Chief mumbled, "Leo, strike a Fifth Alarm," and again fell to the ground. He was dragged backward from the scene. Fire Captain Leo Wisentaner alerted the Fire Alarm Office - "Orders of Chief Clauss - Strike a FIFTH ALARM and send all ambulances that you can."

The momentary leaving of the disaster area to remove some of the casualties by rescuing personnel in the immediate area of the wall debris was extremely fortuitous as this area was subject to a second, even greater, fall than the initial one, for it included much of the brick wall above the third floor which in its collapse dropped into the balcony fire escapes and carried the whole fire escape arrangement to the ground at an angle that tore it from the building (See Photograph E). The debris from this fall covered the remaining victims of the initial fall to an even greater depth. Rescue efforts now proceeded more cautiously in the removal of the remaining victims still buried by the debris because the jagged upper portions of the front wall threateningly hung over these casualties and their rescuers. A ladder still stood at the front of the building against the third floor wall, and the badly injured firefighter (Enrici) at the top slid down the spars and jumped onto the debris and clawed his way to safety (See Photograph F). Directly after the disaster, Assistant Chief John E. Clougherty arrived on the scene and took charge. He re-established the command function and re-organized extinguishment procedure, after he first made the area tenable by using an aerial ladder to dislodge and raze dangerous wall portions (see Photograph G). When certain the area was reasonably safe, he then returned command to subordinates and proceeded to Boston City Hospital for the grim task of identifying a victim of the tragedy, his son, a member of Engine Company 3.

The Investigation. In an attempt to determine the reasons for the disaster an investigation was conducted in three phases:

Construction of building;

(2) Cause and origin of the fire; and

(3) Cause of wall failure.

1. Construction, A visual inspection of the wall construction revealed that the front wall from the street level to the first floor level, a height of approximately 18 feet, appeared to be a solid 16" wall, however, this was not the case. This wall consisted of the two outer courses of brick separated from the third inner course by a four-inch space or the width of one Interlocking of the two separated courses was accomplished every ten rows with a brick placed perpendicular to the horizontal course overlapping the front two courses with the single rear course. This arrangement was staggered between the inner wall and the outer wall so that it appeared interlocking of the courses of brick occurred either without or within, every five rows. The side walls were also so constructed, (See Photograph H). This hollow arrangement was apparently an insulating or ventilating device for as indicated by Photograh "I", ventilating registers were built into the walls on each side.

At several points, where checked, a lime type bonding ingredient, common in the period the building was erected, 1888, appeared to have lost a good deal of its bonding value and crumbled into powder without difficulty. This may be a fault common to all brick buildings in which this type of bonding mixture was used, however, it was unusually deteriorated in this instance which may have resulted from leakage down through this "cavity" wall over the years, washing and eroding the lime content of the mix. Rapid erosion and washing out of the lime content could have occurred at a more accelerated rate as a result of water used in the extinguishment of this fire.

Unusual was the fact that the 2" x 8" roof rafters and floor joists (not "fire cut") did not run parallel to the street but perpendicular to it. These structural members were supported at their exterior ends by by the single course of the brick wall and at the center by a single 8" x 8" carrying timber which was composed of four 2" x 8" rough timbers joined together to make a single 8" x 8". This carrying girth was set on the single course brick at the roof level and ran from side wall to side wall - it was not "fire cut." A similar supporting girth carried the third floor and the second floor.

A balcony fire escape from which the cantilever ladder had been previously removed was secured to the face of the building at the second floor with a metal stairway extending to a balcony fire escape at the third floor and a similar metal stairway extending to the fourth floor ending at a 3' x 3' metal platform at a window on the fourth floor.

A heavy steel I-Beam track protruded through the wall about mix feet beyond the face of the building and extended inside the building beyond the roof carrying center wood girth. This I-beam was secured to the underside of the roof with the inside end fastened to the carrying roof girth. At the point where it

passed through the exterior front wall on its inner side, there was a parallel stell I-Beam of lesser construction than the carrying track which was lagged to the inner side of the front wall to provide suspension for the carrying I-Beam where it extended out of the building. The steel I-Beam carrying track was secured to this parallel steel-Ibeam arrangement which was suspended approximately 20" under the roof which permitted it to project a distance slightly in excess of six feet to allow the track to adequately clear the balcony fire escape arrangement. When in use, the function of this I-beam was to provide a track for a hoist. A double opening freight door stood directly at the center of the building at the street level.

The street floor communicated with West Brookline Street - an unbroken distance of 90'. The second and third floors were partitioned or studded off. The fourth floor was an unbroken open area approximately 30' x 30' including the stairway which served all floors. At the right side of the building a single door led to the street level and upper floors of the building via the stairway.

Entrance could not be gained at the street level at the rear of the fire building. Except for the communication between Trumbull Street and West Brookline Street at street level, the only other access to the fire building was from a through tunnel-like shed arrangement on the roof covering the area joining West Brookline and Trumbull Streets.

2. Cause and Origin, Preliminary investigation of this fire commenced automatically with the sounding of a SECOND ALARM. Members of the Arson Squad continued with this investigation in addition to their regular duties until the morning of October 6, 1964, at which time it was specifically assigned to Arson Inspector Joseph P. Murray.

On October 6, 1964, at 1:00 p.m. an intensive investigation brought forth the names of two juveniles who might have some knowledge which could possibly further this phase of the investigation. In company with Detective Stephen Ritterbush, Juvenile Officer, Division 9, Boston Police Department, Inspector Murray proceeded to a Roxbury School where, in the presence of the School Master, they questioned both the juveniles. The questioing revealed that late on the afteroon of the day preceding the fire, these juveniles had entered the building and had visited each and every area of the building during a period of about one and one-half hours, leaving the premises about 6:30 p.m. They acknowledged the building was secured at the street level and that they had gained entry by alimbing a seven foot chain link fence, passing through a parking loc, climbing a three foot fence abutting an alley which led to the rear of 26 Trumbull Street.

Both youngsters, one age 14 and one age 11, using a chair climbed to the roof of a shed butting against the exterior of the common area joining the West Brookline Street building with 36 Trumbull Street, the fire building, and the taller of the two boys then hoisted himself to the roof of this common area and reaching down assisted his companion to the roof, Entrance was gained through a window at this level. Once inside, they rummaged through every area of the building, noting a large accumulation of trash and rubbish such as model airplanas of the wooden type, and several filled squirt cans containing model airplane fuel mixture of castor oil and alcohol with a trade name of "T.N.T." There is no doubt that this substance was here for both juveniles positively identified its presence on the premises and although the razed condition of the building precluded a more detailed search of the interior, it had been possible to retrieve two filled cans of the substance from the ruins.

Upon leaving the building, the two youngsters were seen by a woman occupant, living on the second floor of the West Brock-line Street portion of the building, who cautioned them against taking anything from the building. Both boys acknowledged that a woman warned them as they were leaving the building at or about 6:30 p.m. The youngsters left the building by reversing their entry procedure.

With the knowledge obtained from the interrogation at the School and in accordance with procedure, Arson Inspector Murray and Detective Ritterbush went to the homes of each of the juveniles and notified the parents that each youngster had been questioned with reference to the fire on Trumbull Street and that information obtained was being referred to Boston Police Division 4, in which Division the fire building is located. Accompanied by Detectives Costello and Hayden of Division 4, Arson Inspector Murray and Detective Ritterbush (in whose area the juveniles resided), returned to the homes of the juveniles and notified their parents to have each boy at Police Division 4 on the following day in the morning.

With the appearance of the juveniles at Division 4 at 10:00 a.m. on October 7, 1964, the following information was ascertained:

- (1) That they had obtained entry in the manner previously stated.
- (2) That the building contained a reasonably high floor loading of Class A combustibles, such as corrugated cartons, some Class B inflammables, and discarded trash usual to areas being utilized as or having been used as merchandizing warehouses.

- (3) That there were cans of paint on the floor; the cans were flot. Paint cans were standing up and were all greasy and had oil in them, that they saw an orange can and noted that it read "T.N.T.", that each picked up a can of the model airplane motor fuel.
- (4) That the younger of the two youngsters averred the older boy had said to him.... "Anybody who wants to start a fire could do so easy 'cause there is a lot of burnable stuff here." The older boy angrilly retorted that he said no such thing.
- (5) That they had rummaged through various boxes of apparently discarded merchandise in search for something of value.
- (6) That there was water on the floor at the street level in which small wooden propellers were floating and an old book of matches, soiled and burned out.
- (7) That the only light in the first floor was from a light shaft that shown down (the skylight in the common building area).
- (8) That they both were newsboys and scheduled their time to be at the Northampton Street Station to pick up papers at or about 6:30 p.m.
- (9) That there was a marked difference in the time of delivery of these newspapers with the younger boy stating it was about 1 1/2 hours after they had left 36 Trumbull Street and the other stating it was only 10 or 15 minutes after they had returned to the Northampton Street Station of the Metropolitan Transit System.
- (1)) That the older boy admitted he was in the habit of carrying matches which he obtained from cigarette vending machines, but he has not carried any matches in his pockets since the fire.
- (11) That the older boy was in the habit of indiscriminately lighting these matches.
- (12) That the older boy became angered when this habit was exposed by the younger boy who added that he (the younger boy) when in the company of the older boy indulging in this habit, would step on lit matches to extinguish them.
- (13) That under a direct question, "Did you light a match in this building?" - the older boy vehemently denied it. He was then asked, "Are you sure you unconsciously did not light a match?" - to which he replied, "what's that mean - -I did not do that."
- (14) The older boy was then asked if it were possible for him to have matches in his pocket and not be aware of it. His reply was he did not have any matches. Asked how he could see in dark areas of the building, he stated it was light out and there were windows in each room.

(15) That they both acknowledged speaking to a woman as they left the building.

On October 19 and on October 28, 1964, both boys were brought before Judge Robinson of the Boston Juvenile Court and were adjudged delinquent.

- 3. Cause of Wall Failure. With the removal of the victims from the fall area, in order to alleviate some of the danger, as previously stated, Assistant Chief John E. Clougherty, ordered certain portions of the front wall razed using an aerial ladder truck, re-established the command function, and re-organized the extinguishment operation. The Building Department upon its survey of the fire ruins promptly engaged a building wrecker to raze the front wall and portions of the side wall to the street level and bulldozed the debris in the street back into the U-shaped area formed by the remaining side walls and back wall to furnish some support to these free-standing walls. It was under these conditions that the investigation was conducted, Interrogation of firefighters who were at this fire was not too productive and it was necessary to reconstruct the incident on the basis provided by photographs, visual examination of construction materials, analysis of operational procedures at fires, photographs taken after the initial fall, untouched wall residuals still standing, statements of personnel, and obvious vactorial movement of masses. Using information thus gained, it has been possible to establish the sequential pattern which led to the failure of wall with reasonable certainty. This was as follows:
 - (1) That the fire was burning for an extended period of time before it was discovered, for the person who sounded the alarm smelled smoke one-half hour before he sounded the alarm but did not know where it came from. This individual was better than one hundred yards away from the fire scene, and weather conditions were such as to not accelerate movement of smoke or burning to any great extent.
 - (2) That the fire without doubt originated on the second floor level on which we know from interrogation that there was a heavy floor loading of combustibles contrary to the owner's statements (See Photograph K).
 - (3) That, from the owner's statements, the basement contained desks and office furniture, some boxes of toy plastic railroad ties on the street level, corrugated cartons on the second floor, cartons of missellaneous defective model kits on the third and fourt floors with some filled paint caps and model airplane engine fuel in cans as part of the kits.
 - (4) That the contents of this building were strewn about each floor and each stairwell as a result of trespassers (juveniles) rummaging through the building.

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- (5) That with the arrival of apparatus, fire was overlapping from front and rear at the second, third and fourth floor levels and starting to break through the roof near the front (See Photograph K).
- (6) That with the venting of the roof by the fire itself, its progress was hastened so that the roof's main carrying timber and roof rafters were consumed at an accelerated rate.
- (7) The main roof carrying girth suffered rapid weakening by the fire, and close examination of this girth after the fire disclosed that the ends which set on the single brick course serving each side wall were termite ridden which was an unknown previous hidden weakness.
- (8) That the securing arrangement of the steel I-Beam at the ceiling level of the fourth floor necessitated a double beam suspension arrangement to permit its attachment to the roof rafters which ran perpendicular to it. This was accomplished at the inner face of the front exterior wall and was supplemented by lagging the suspension arrangement to the inner face of the front brick wall.
- (9) That the roof rafters which supported the suspension arrangement on the inner face of the building to which the I-Beam was attached burned and weakened first (Note fire coming through roof at front of building in Photograph K).

 Which caused the left side of the hanging arrangement to fall first.
- (10) That the right forward end of the suspension arrangement held which permitted the suspension arrangement to assume an unbalanced position.
- (11) That as a result of this unbalanced arrangement, the weight of the I-Beam imposed an uneven force on the wooden main center carrying girth which, termite ridden and severely attacked by fire, tore out of its slot at the top of the left wall, and under the uneven twisting force being exerted upon it by the steel I-Beam and the unbalanced heavy steel suspension arrangement moved down and forward (see Photograph E and enlarged Photograph L).
- (12) That this movement for all practical purposes was instantaneous, i.e., as the suspension arrangement and I-Beam dropped, its changing position was immediately transmitted to the center girth which tore from its carrying slot and permitted it to move down and forward.
- (13) That this instantaneous acceleration imparted to the IBeam mass was promptly imparted to the inner face of the
 front wall dislodging the upper portion between the tops
 of the fourth floor windows and the coping and impacted
 it into Trumbull Street with sufficient force to clear,
 for the most part, the fire escape.

- (14) That this impacted mass cleared the fire escape and fell onto the ladders extended to the third floor balcony fire escape, utterly destroying Ladder Company 4's 35' extension ladder and severely damaging Ladder Company 3's ladders (See Photographs M and G).
- (15) That this impacted mass landed on firefighting personnel on the ladders and in the immediate vicinity of the base of these ladders and was the primary cause of the majority of casualties.
- (16) That the roof rafters which extended from the center main girth to the rear wall of the building with the forward and down movement of the center girth pulled in a portion of the rear wall (See Photograph N) with some outward bulging of bricks at the point where the rear wall parted causing a portion of the bricks to fall outward at the rear of the building. These bricks struck the communicating shed on the roof of the common area serving Trumbull and West Brookline Streets, practically flattening it out, and inflicting casualties (non-fatal) on firefighters at the rear of the building this was actually part of the initial fall (See Photograph 0).
- (17) That with the inward falling of the major portion of the top of the rear wall and the added force of the falling roof, the fourth floor level under even longer fire attach dropped forcing out the upper portion of the brick front wall.
- (18) That the loosened brick cascaded down the fourth floor fire escape stairway onto the third floor balcony fire escape superimposing a weight load probably far in excess of its limitations, tearing this balcony from its supporting braces. With this shearing off of the third floor level, the fourth platform level tore from its supporting braces. This mass of brick and steel hurtled downward onto the second floor fire escape, shearing it from the front of the building with the entire fire escape arrangement dropping to the ground. This drop was slightly from left to right for the bricks were directed by the fourth floor fire escape stairs to the right (See Photograph E).

Discussion. Early in the investigation, it had been held that two separate and distinct falls had occurred. From information furnished by personnel at the scene, it was not possible to confirm this, for it was believed that anything falling after the initial fall would be in the nature of residual brick or a continuing part of the first fall. It has been very definitely established that there were two separate and distinct falls with with a period of time less than two minutes elapsing between the first and second fall. It has been every definitely established that a portion of the rear wall toppled in simultaneously with the initial fall of the front wall as a result of the obvious articulation which must have occurred with the radial downward movement of the center girth.

The second fall was directly initiated by the first fall, for with the added weight of the inward fall of brick from the rear wall, the fourth floor was carried down. It should be established that the side walls of this building were of the "cavity" type throughout their height but that the front wall was a "cavity" type wall only from the street level to the second floor level at which point, the wall to the roof was solid three course brick in the front and in the rear walls.

From statements of eye-witnesses, at the moment of the initial fall, which is established at 12:50 a.m., a pall of smoke and white vapor extended from the second floor exterior to and above the roof. Personnel at the base of the ladders were visbile. This condition existed as a result of firefighting operations at the second floor level rear which was reaching the actual burning interior at this level and dampening it down. There was no fire on the first floor. These same eye-witnesses uncomprehendingly, for the moment, witnessed the tragedy and with the coming of realization of its enormity managed to photograph various phases of the tragedy which were of great value in reconstructing the situation.

In support of conclusions drawn in this report, Photograph D shows members of Engine Company 37 digging out a victim of the initial fall. At this point, careful analysis of the photograph, when coupled with procedural awareness leaves no doubt that this rescue was accomplished before the second fall. is known that Engine Company 24 had taken a line of hose over Ladder Company 3's 35' extension ladder (See Photograph B) and was securing it with a rope hose line to the third floor balcomy at the time of the initial fall. It is known that a recently promoted fire lieutenant (a ladderman) was mounting Ladder Comparty 4's 35' extension ladder. It is also known as a result of interrogation that all victims of the initial fall were covered by the debris shown in this photograph, which includes Ladder Company 4's destroyed 35' aluminum ladder (see photographs C and D) and Ladder Company 3's badly bent but still raised 35' aluminum extension ladder. Photograph D indicates that the third floor balcony fire escape was still affixed to the building, for the charged line of hose still extends upward to it. With the subsequent falling of the fire escape, this line of hose lies on the debris (see Photograph G).

With the removal of some of the victims by rescuing personnel available, a momentary general exodus from the immediate area occurred which was fortunate, for the second fall which occurred catapulted more debris upon those victims remaining within the lethal debris of the first fall.

The Deputy Chief within the perimeter of the initial fall was knocked down. He tried to get up but fell again and was assisted from the immediate area by rescuing personnel in the interim between the first and second fall.

Conclusions.

- 1. That the dampening of the fire was one factor that prevented visual notice, if such existed, of danger from above.
- 2. That the wood center supporting girth in its movement failed to give any warning due to its being termite ridden to the extent that it powdered to the touch (See Photograph P).
- That the entire incident was of the chain reaction variety with one failure initiating another failure toits tragic conclusion.
- 4. That the lime bonding mortar common to the era of construction during which this building was erected, with age loss much of its bonding value, especially if exposed to water.
- 5. That it is not reasonable to assume a vagrant entered these premises since the entire area has many unsecured buildings more easily entered. It is the opinion of investigating personnel that vagrants did not enter.
- 6. That entrance to this building was available only to an agile person.
- 7. That the fire did originate on the second floor and burned for an extended period of time before it was discovered, since the area is not heavily traveled by the public after dark.
- 8. That from outward visual inspection, the wall appeared sound.
- 9. That fire department operations did not induce or contribute to the collapse of the wall.
- 10. That the fall of the initial mass was caused by the impacting of the upper portion of the wall by the I-Beam suspension arrangement.

William A. Terrenzi Chief of Department