**The Museum of Safety: responsibility, awareness and modernity in New York, 1908-1923**

**Introduction**

This assessment of the origins and development of the Museum of Safety in New York in the early twentieth century reveals how the hazards faced by industrial workers and the wider public were used by campaigners within the city to reform the populace. Inaugurated in 1908 by leading social and religious reformers, the Museum of Safety offered a vision of a progressive institution whose objective was to inform and educate individuals on the latest mechanical and practical principles of safety in order to prevent accidents, to conserve life and limb and to ensure the competitiveness of industry. Therefore, in an era of political, social and ethnic tensions, the Museum of Safety worked to build a cohesive society through a ‘consciousness of risk’.[[1]](#footnote-1) The development of this ‘safety consciousness’ and the formation of a ‘risk society’ has been referred to by scholars as marking the advent of the ‘modern age’ as the effects of mass industrialisation produced a ‘future-orientated’ culture.[[2]](#footnote-2) The Museum of Safety demonstrates this alteration as it attempted to guide the progression of society in New York and the wider United States by shaping attitudes towards awareness, responsibility and identity.

However, despite its assistance with a number of national, corporate and municipal initiatives, the institution became marginalised from its once prominent role as the ability of the museum to represent ideas of progress were questioned. [[3]](#footnote-3) This reflects wider tensions regarding the role of museums, libraries and galleries in ‘modernising’ American society from the late nineteenth century.[[4]](#footnote-4) As a tool of reform or as a means of asserting tradition, the relationship between museums and the modern age reveals how institutions in this era placed themselves at the cusp of change as urbanisation and industrialisation accelerated the nation into the future.[[5]](#footnote-5) As such, some museums could became focal points within American cities but some could also disappear as they failed to address the concerns of their visitors and patrons in a rapidly developing society.[[6]](#footnote-6) In effect, the speed of the modern age could render institutions irrelevant. The Museum of Safety demonstrates this process; the museum’s board members sought to promote safety awareness to reshape society but within two decades the institution was redundant as a concern for safety in New York was institutionalised by the city authorities. Whilst the organisation had successfully raised the profile of health and safety, the use of a museum to guide this aspect of the future proved inappropriate for its subject matter; the museum with a modern mission was undermined by the same processes of modernity.

The history of the Museum of Safety supports the development of an alternative perspective on the ‘Progressive Era’ politics and culture of the United States which worked to reform New York and its institutions from the late nineteenth century to the early twentieth century.[[7]](#footnote-7) Whilst the term and its meanings have been revised by scholars since the 1960s, the ‘Progressive Era’ has maintained a central place in the redemptive narrative of American history that moves from ‘Gilded Age’ excess to enlightened modernity.[[8]](#footnote-8) However, recent studies have moved beyond these restrictive periodisations to assess how this era of dramatic technological, scientific and social change marked a period of complex negotiation.[[9]](#footnote-9) In this manner, the roles and responsibilities of government, corporations and individuals are redefined and reinforced as the shape of the present and the possible future of society is demarcated.[[10]](#footnote-10) It is in this process of controlling and projecting onto the imminent that the ‘Progressive Era’ can be accurately assessed.[[11]](#footnote-11) The Museum of Safety serves as a microcosm of this alteration as its founders developed an institution to respond to the public and private risks in the city to improve the metropolis. However, in this process of defining the future, the Museum of Safety was cast as irrelevant as it failed in asserting its vision of the modern world.

**New York and a museum of ‘social economy’**

New York had become plagued by the consequences of its unrestricted development by the latter half of the nineteenth century. As the city had expanded as a centre of industry, manufacturing trade and finance, its population had grown from 515,547 in 1850 to 3,437,202 by 1900 through mass-migration.[[12]](#footnote-12) With this economic expansion and the rise in population, individuals were increasingly exposed to an array of dangers within the metropolis as they entered into the modern age.[[13]](#footnote-13) Citizens were at risk from domestic fires or contagion spread by low-quality, unsanitary housing conditions; mutilation or death from poorly maintained sweatshops, factories and labour yards; or, injury from the carriages, omnibuses, trams and subways which traversed the city. Indeed, by 1900 a total of 3,012 accidental deaths were recorded in the metropolis; a figure which had increased to 3,811 merely a year later.[[14]](#footnote-14) The city’s corporations were increasingly troubled by this situation as they faced financially-damaging lawsuits. The court cases in New York between 1890 and 1900, dealing with injuries sustained in the workplace, rose from just over twenty a year to over a hundred annual hearings by the end of the century.[[15]](#footnote-15) Businesses could also find themselves involved with potentially highly damaging court cases regarding their liability for the deaths and injuries of citizens. Indeed, the Brooklyn Rapid Transit Authority was prosecuted for the recovery of $100,000 for one incident in 1900 when a young woman was killed by a trolley car near Coney Island.[[16]](#footnote-16)

The increasing dangers posed by the modern age was occurring whilst reformers in the city sought a greater degree of involvement in the lives of the residents of New York to improve housing, education and sanitation.[[17]](#footnote-17) Safety was a key feature in this movement as it emphasised personal responsibility to ensure collective wellbeing.[[18]](#footnote-18) In a diverse city with extremes of poverty and wealth, emphasising ‘safety’ could also bring stability and progress to New York.[[19]](#footnote-19) Through a concern for ‘risk’, a new ‘modern’ relationship between individuals, corporations and society was forwarded as the rise in accidents was perceived by reformers as evidence of a break in the social contract within the metropolis.[[20]](#footnote-20) The preacher Josiah Strong (1847-1916) was one of the most prominent voices in this campaign. Strong had settled in the city in the late 1880s, after his work founding and coordinating the ‘Evangelical Alliance’ in promoting Christian reform of American society.[[21]](#footnote-21) Strong railed against New York for its exploitative capitalism and mass immigration in his widely-read treatise, *Our Country* (1885).[[22]](#footnote-22)

For Strong, in this new era of change, the ‘Social Gospel’ movement would transform New Yorkers through notions of awareness and responsibility.[[23]](#footnote-23) The concept of the ‘Social Gospel’ sought to instil a sense of Christian charity and to encourage a greater sense of duty, perseverance, chastity and temperance from the individual.[[24]](#footnote-24) Strong developed a variety of associations with other likeminded politicians, reformers and Protestant clergymen in New York who similarly damned the city for its disparity of wealth and forwarded concepts of intervention to ensure political stability.[[25]](#footnote-25) With this backing, Strong initiated the League for Social Service to further the cause of reform and renewal, both spiritual and temporal, in 1898. This New York organisation, attracted supporters as an educational service, designed to collect, analyse and disseminate information on social and industrial conditions.[[26]](#footnote-26) The League began issuing periodicals and pamphlets to support alterations in housing, labour, education and health within the metropolis to secure public safety.[[27]](#footnote-27) However, the organisation was increasingly drawn to displays and exhibitions through which they could inform and instruct the populace.[[28]](#footnote-28)

American museums in the late nineteenth century offered alternative practices in the design and formation of their displays. [[29]](#footnote-29) However, from the enriching arrangement of ‘high culture’ to the ordered knowledge of natural history, institutions used exhibition space to define class, gender and race.[[30]](#footnote-30) This mode of exhibiting was also present in the curiosity shows, world fairs, expositions and the department stores of the Gilded Age.[[31]](#footnote-31) For commerce, entertainment, education or enlightenment, the exhibition served as an ideal form through which American society could be reformed, reimagined or reasserted with the developments of nineteenth century society.[[32]](#footnote-32) Indeed, in New York, exhibitions and displays in the public museums were fashioned with the intention of defining class roles as well as encouraging the betterment of citizens through cultural or educational awareness.[[33]](#footnote-33) Whilst exhibitions in the department stores of the city asserted notions of taste and distinction, displays organised by reform groups cultivated charity and progressive values.[[34]](#footnote-34) For example, the highly-influential Tenement House Exhibition of 1899, had demonstrated the power of the display format in promoting reform agendas.[[35]](#footnote-35) On this basis, the use of expositions and fairs had been forwarded by Strong as a means through which the League could shape society.[[36]](#footnote-36) To develop this work, Strong appointed the reformer and social scientist, William Tolman (1861-1958) as Director in 1898.[[37]](#footnote-37)

Through donations from individuals and corporations, Tolman assembled an exhibition of lantern slides on the condition of cities across the United States and specifically New York.[[38]](#footnote-38) This exhibition was first unveiled to the city’s political, industrial and religious elite during March 1900 in the Manhattan home of the socialite and philanthropist Helen Miller Gould Shephard (1868-1938).[[39]](#footnote-39) The success of this endeavour led to the commission by the United States Government to transfer the display to the Exposition Universelle in Paris from April 1900.[[40]](#footnote-40) This venue, replete with scientific, cultural and industrial displays from across the world, offered a demonstration of how the organisation could move forward with its agenda through exhibitions.[[41]](#footnote-41) Tolman was also inspired by the work of the Musée social in Paris.[[42]](#footnote-42) From 1894, the Musée was developed to promote the notion of the ‘social economy’ to improve urban society.[[43]](#footnote-43) An array of materials on housing, health and industrial conditions were displayed in the Musée’s exhibition hall near the Seine.[[44]](#footnote-44) The Musée’s goal of social reform through the use of exhibitions was shared across late nineteenth century museums of labour, science and technology in Europe.[[45]](#footnote-45) These institutions, sponsored by wealthy industrialists, businesses or governments, focused upon asserting class roles and responsibilities in the workplace to avoid the social discontent which could be fostered by injuries or deaths in the workplace.[[46]](#footnote-46)

It was this use of exhibitions by German industrial museums, who also exhibited at the Universelle, that gave direction to Tolman and Strong.[[47]](#footnote-47) Tolman was also encouraged by the work of the Scottish urban planner Sir Patrick Geddes (1854-1932). Geddes had used exhibitions in Edinburgh as a means to inform and educate the public on industrial reform in the 1890s.[[48]](#footnote-48) In Paris, Geddes remarked upon the accessible modes of engagement that exhibition space afforded.[[49]](#footnote-49) Strong and Tolman subsequently wrote to Geddes seeking advice for what they hoped would be a ‘Social Museum’ or a ‘Museum of Social Economy’ in New York.[[50]](#footnote-50) The proposed museum was envisioned as the centre of a grand reforming movement:

Fully set forth in print and picture would be shown what is being done in the matter of industrial betterment. What the wealthy employer is doing to improve the morals and intelligence of his workers, the most approved methods of hygiene in factories, the beautifying of the working man’s home, the progress of the movement for social betterment by the churches of all denominations, and the philanthropic societies...and what municipalities are doing along the same lines with parks, playgrounds, and open-air gymnasia. [[51]](#footnote-51)

To advance this programme, Tolman took the leading role towards founding a museum under their new name, the American Institute of Social Service.

**The Museum of Safety**

Tolman began promoting the need for the museum by highlighting the problems facing society in the modern era and the need for ‘safety’ as a concern to ameliorate the potential for dissent and disintegration.[[52]](#footnote-52) This work was principally undertaken within the field of industry and the organisation gained prominence with their International Exposition of Safety Devices and Industrial Hygiene in New York during January and February 1907. The exhibition was housed within the American Museum of Natural History with a variety of safety devices and information from over three hundred global companies and industries contained within display cases and tableaus.[[53]](#footnote-53) The venue in one of the most prestigious museums in the city was organised by Tolman as a means of demonstrating the importance of an institution devoted to the preservation of life.[[54]](#footnote-54) Tolman stated:

The object of this exposition is to direct the awakening of public opinion to the necessity of active steps toward lessening the causes of accidents endangering the life and safety of the American workingman, and by means of a permanent museum of security, where all problems of such safeguarding can be studied in working detail, to effect permanent industrial betterment.[[55]](#footnote-55)

The event garnered the support of New York State Governor Charles Hughes (1862-1948), who spoke at the gala dinner at the Waldorf-Astoria of the need of a reforming institution to educate the diverse populace on how to protect themselves.[[56]](#footnote-56) To demonstrate this, during the exhibition, Tolman spoke of the scale of death within American industries each year.[[57]](#footnote-57) The exposition was successful, providing the impetus for the creation of the American Museum of Safety Devices and Industrial Hygiene in April 1907.[[58]](#footnote-58) The museum was incorporated with Tolman as President, an advisory board of honorary vice-presidents from politics and industry, working committees, a ladies committee and courtesy of the periodical *Scientific American*,a medal to be awarded by the museum to the inventor of the best safety device.[[59]](#footnote-59) With the trappings of an established and venerable institution, the museum was based near Times Square on 239 West 39th Street, renting the third floor from the McGraw Realty Company.[[60]](#footnote-60) In these new surroundings, a smaller second Exposition of Safety Devices was held between May and June 1908.[[61]](#footnote-61) With the support of prominent businessmen, industrialists, politicians and reformers, Tolman forward a programme of exhibitions to alter the morals, behaviours and ideas of the populace:

The exhibits will consist of devices for safeguarding the lives and limbs of workmen and preventing accidents under the ordinary conditions to which the general public is exposed. The museum will display, as far as possible, ‘live exhibits’, that is, machines or devices in operation, models of actual or reduced size, and photographs.[[62]](#footnote-62)

A similar initiative of using exhibitions to inform society on issues of safety and wellbeing was also being pioneered with the installation in 1909 of a public health department within the American Museum of Natural History.[[63]](#footnote-63) In this context, Tolman and the Vice-Presidents renamed the institution as the ‘Museum of Safety and Sanitation’ and relocated in early 1910 to 29 West 39th Street where it was housed within the United Engineering Societies’ Building. This structure, built through a donation by the industrialist Andrew Carnegie (1835-1919), was designed to bring together the offices and interests of manufacturing and engineering societies in the city.[[64]](#footnote-64) These premises were well-appointed; libraries, lecture rooms, galleries and private chambers were provided to organisations to further their aims and objectives. The Carnegie Corporation also began financially supporting the museum with an annual sum of $5,000 being paid between 1911 and 1919.[[65]](#footnote-65) This patronage enabled the museum to develop as new expositions were held on safety devices, regular meetings and talks were convened, guest lecturers from across the world were hosted whilst pamphlets and booklets were printed and distributed from the museum’s new headquarters.[[66]](#footnote-66) In 1909, the bulletin *Safety* was launched by the museum to disseminate the latest information on the safety agenda across the United States. To indicate this new status, the museum’s board was reformed from prominent members of the city’s industrial, economic and political classes, whilst the institution developed sub-departments concerned with the protection of life in transportation, mining, textiles, building trades, chemical and agricultural industries.[[67]](#footnote-67) With its financial and political backing from the Carnegie Corporation, the stress on social stability and individual responsibility were paramount in exhibitions and leaflets as the museum’s concern for ‘social engineering’ rather than ‘social economy’ was reflected in another name change in late 1910: the American Museum of Safety.[[68]](#footnote-68)

The significance of this new agenda was demonstrated in the designation of the museum as a corporation by the New York State Senate in 1911.[[69]](#footnote-69) This enabled the museum’s board to raise funds through membership fees which were charged for individuals ($5), businesses ($10) and industries ($25). The museum was unparalleled within the metropolis, as it provided advice and guidance in a city that appeared to be beset with dangers. During 1910 to 1911, New York and its surrounding area witnessed four major accidents which appeared to justify the museum’s remit; the Newark Factory Fire of November 25 1910 (25 fatalities), the Grand Central Station Explosion in Manhattan of December 19 1910 (10 fatalities), the Communipaw Explosion near Jersey City of February 1 1911 (30 fatalities) and the Shirtwaist Triangle Factory Fire in Manhattan of March 25 1911 (146 fatalities).[[70]](#footnote-70) Tolman positioned the museum as the centre for reform and safety in the wake of these disasters.[[71]](#footnote-71) Indeed, Tolman testified in front of the Factory Investigating Commission, set up in the aftermath of the Triangle Factory Fire, that museum displays could take a leading role in workplace safety.[[72]](#footnote-72) Though its exhibitions, the museum was promoted as the advocate for the workingman, the aid to corporations and the assistant to politicians; an increasingly difficult remit with the rise of trade union activism and the suspicion of socialist radicals in the city.[[73]](#footnote-73) To counter dissent and to preserve the role of industry and capital, the museum’s materials focused upon reforming the character of the individual; sobriety, education, exercise were all featured as the museum demanded a new sense of responsibility within society.[[74]](#footnote-74)

To address a broad audience, temporary exhibitions and displays on maintaining safety were held in the United Engineering Societies’ Building. For example, an exhibition on fire safety in the workplace and in the home was highly prominent in the museum after May 1911 and coordinated with the former Chief of the New York Fire Department, Edward F. Croker (1863-1951).[[75]](#footnote-75) The instructive nature of this information was significant; it emphasised personal responsibility rather than corporate liability. As part of this approach, the museum launched another International Exposition in Grand Central Palace in midtown Manhattan during early December 1913. The event provided displays of all the advances in safety and welfare that had been achieved across the United States within the premier venue of the city. Protective devices for workers, educational films, safety guards for cutting machines, sanitation procedures to prevent typhoid and illuminated plans for buildings and offices were exhibited as the museum encouraged companies to demonstrate their engagement with the growing national movement of ‘safety first’.[[76]](#footnote-76) This development was shaped by the concern that *laissez faire* attitudes to workers’ health and safety damaged profits, reduced productivity and potentially led to the increase in support for trades unions and socialist groups. The exposition in Grand Central Palace promoted a collective goal of safety as a means of social and political cohesion.[[77]](#footnote-77) The event was certainly a success with an average daily attendance during its ten day period of over 10,000 people.[[78]](#footnote-78) Through this exhibition, the museum was able to disseminate the idea that safety provisions were a public service and a subject of concern for all residents of the metropolis.[[79]](#footnote-79)

The use of this ‘risk consciousness’ to reform society was also present in the museum’s programme of work with the city’s educational institutions. By March 1913 after Tolman successfully petitioned New York’s Department of Education, a children’s ‘Safety Day’ was initiated.[[80]](#footnote-80) The event was coordinated across the city’s public schools so that at 2 o’clock on April 4 all teachers read a prepared lecture by the museum entitled ‘Safety and Caution’.[[81]](#footnote-81) The lecture, addressed to over 700,000 schoolchildren, contained practical advice on how to behave on the city’s streets to avoid accidents caused by automobiles, trains and trolleys.[[82]](#footnote-82) In encouraging attendance and participation at the museum, it served as a means of inculcating behaviour and values onto the youth of the metropolis.[[83]](#footnote-83) The organisation’s work in this field was supported by the railroad operator, the Brooklyn Rapid Transit Authority, who provided leaflets, badges and buttons to children who signed up to the principles of ‘safety and caution’. The museum also initiated a ‘Safety League’ for boys from the upper grades who were tasked with guiding younger children across roads and trolley crossings as well as observing safety rules during playtime.[[84]](#footnote-84) In this attempt to encourage the next generation to ‘safeguard humanity’, the museum also published a series of instructional children’s stories on how to play safely on the city streets.[[85]](#footnote-85)

The museum’s association with industry was further strengthened during this era as, alongside its *Scientific American* medal, further awards were gifted to the institution by 1913 to award to businesses for their low accident reports or for their development of safety devices. The E.H. Harriman Memorial Medal, named for the railroad entrepreneur and donated by his widow, was to be awarded to the steam railroad company for the best safety record for workers and passengers. This award would be supplemented in 1914 by the Anthony N. Brady medals which acknowledged the safety and hygiene measures of electric street railways. The Rathenau Gold Medal, named after the German industrialist and reformer Emil Rathenau (1838-1915), was awarded for the best electrical device that safeguarded workers. The Seaman Medal, named after the noted United States Army surgeon, Louis Livingston Seaman (1851-1932), was awarded for advances in surgical procedures that saved lives. Finally, the Travellers Insurance Company’s Gold Medal, was awarded to the individual or company that has undertaken the most work to ensure the safety of employees, customers or the wider public.[[86]](#footnote-86)

As Tolman provided the museum with a wider role, it was seen as central in the city’s development in the modern era. Speaking in December 1913, Manhattan Borough President George McAneny (1869-1953) gave voice to these sentiments:

The relation of the City to this museum should not be far different from that which it holds to the Museum of Natural History; it should not be different from the relation which it holds to the Museum of Art; and our relation to many other institutions that have to do with the education of the people.[[87]](#footnote-87)

The importance of the museum was demonstrated in the research disseminated in *Safety* which by 1913 was being published every month. Such was the success of this periodical that the museum applied for copyright of the name in 1914 to protect it from unlicensed usage by unscrupulous and unsafe firms.[[88]](#footnote-88) The rapidity by which the museum had established itself was significant. In the summer of 1914, the city’s press marvelled at how the previous decade had seen the growth in interest in safety across the entire country and they highlighted the museum as the epicentre.[[89]](#footnote-89) Museums of safety had been instituted or planned in San Francisco, Boston and Toronto on the New York model whilst a bill introduced to Congress in July 1914 forwarded the idea of a ‘National Museum of Safety’ in Washington, DC.[[90]](#footnote-90)

This status was demonstrated in the decision by the New York Senate to amend the Greater New York Charter in April 1914 (Chapter 466). The Board of Estimate and Apportionment, the governing financial body of the city of New York, were thereby enabled to award to the museum an annual sum of up to $50,000 if the institution maintained free entry, education programmes and research work for individuals, businesses and the city authorities.[[91]](#footnote-91) Subsequently, the directors of the museum appealed in September 1914 for a grant of $7,250 to cover expenses of rent and the employment of staff members.[[92]](#footnote-92) This appeal was ultimately fruitless with no record of any payment in the city’s budget.[[93]](#footnote-93) The museum’s remit of safety in society was also not as immediately recognisable to the Board of Estimate and Apportionment as a public benefit in comparison to the Metropolitan Museum of Art and the Museum of Natural History who both received generous public funds.[[94]](#footnote-94) Despite these financial constraints, the museum expanded their exhibitions, including objects and diagrams from companies who were eager to demonstrate the new technologies of the era. For example, the New York Edison Company’s safety work in electrical engineering was the prominent display from July 1914 which detailed the work undertaken for the ‘safety and welfare’ of its employees’. This exhibit included protective apparatus for workers, insulating and earthing equipment for electrical wiring and the documents used to inform labourers of their roles and responsibilities for preventing and reporting accidents (Fig. 1).[[95]](#footnote-95)

(INSERT FIGURE 1 HERE)

Undeterred by the lack of public funds, Tolman organised another safety exposition in Grand Central Palace in December 1914. This event attracted large crowds who witnessed the advances in fire prevention, safety management and health controls.[[96]](#footnote-96) The event was overshadowed by the outbreak of war in Europe in August 1914, but the conflict also inspired discussions and displays on safety equipment on the battlefields. Indeed, Garrett A. Morgan (1877-1963), displayed to great acclaim his ‘safety helmet’ designed to filter noxious fumes for the wearer.[[97]](#footnote-97) The broader appeal to the protection of human life was also present in the expansion of the museum’s concern beyond the confines of the industrial and educational sector. Under Tolman’s direction, the museum’s staff began working with the municipal authorities to provide instructional manuals for pedestrians to deal with the array of potential threats on the road and on the pavements.[[98]](#footnote-98) The museum’s role as an educator across society was thereby reaffirmed; the museum’s objective was to reform the behaviour of its customers, its visitors and its wider community. Frederick R. Hutton (1853-1916), Vice President of the Museum of Safety and Professor of Mechanics at Columbia University, praised this capacity of the institution; its exhibitions, collections, models and reports were all a ‘means to this educational end.’[[99]](#footnote-99)

**A new home for the museum**

The Museum of Safety was not alone in its promotion of responsibility as a means of modernising the nation. The National Safety Council (initially named the National Council for Industrial Safety) had been formed in Chicago during 1913 and had established links with industry and government to promote safety at home, at work and in public.[[100]](#footnote-100) Whilst the two collaborated, the board of the Museum of Safety sought to demonstrate its own method of exhibitions, displays and engagement as the most appropriate approach. The work of the museum in this regard was further enabled by the renting of new premises for the institution from February 1915 at 14-18 West 24th Street. This Renaissance-style building, constructed in 1904, offered the institution a means to integrate itself within the lives of the individual worker. Situated in the garment district of the city, the museum was now placed on the ground level, with wide, store-front windows to display to the public and used prominent signage to ensure it could engage with the ‘man in the street.’[[101]](#footnote-101) (Fig. 2) From March 1915, the museum began holding monthly displays of devices or dioramas in the windows, donated by companies to demonstrate new procedures or to ‘excite’ and educate the passer-by.[[102]](#footnote-102) The new location also provided the museum with an opportunity to encourage a wider membership and to reformulate the workings of the institution. Whilst Tolman remained as Director, Arthur Williams (1868-1937) and A.A. Hopkins (1869-1939), both full-time employees of prominent New York companies, took upon influential roles within the museum. Through the engagement of these members, the museum began to focus more upon the principles of self-reliance and improvement for the individual as a means of adjusting to the modern age.[[103]](#footnote-103)

(INSERT FIGURE 2 HERE)

Whilst the museum’s new location demonstrated its commitment to displays and exhibitions, an increasing use of film was made by the museum to engage with its audiences. The development of motion pictures featuring workplace, domestic or street accidents provided a new medium in which to inform and educate the populace.[[104]](#footnote-104) Productions such as *Steve Hill’s Awakening* (1914), *The Locked Door* (1914) and *An* *American in the Making* (1913) highlighted the dangers wrought by poor safety procedures in the workplace as well as the significance of appropriate behaviour for American workers.[[105]](#footnote-105) This focus on patriotic values was significant as despite the officially neutral stance, the tensions in Europe had brought issues of allegiance and identity to the fore within New York and the wider United States.[[106]](#footnote-106) The Preparedness Movement, which originated in the metropolis from within the city’s financial and political institutions, supported the Entente and the development of the nation’s military and a patriotic dedication to the state which was encapsulated in the programme of ‘Americanization’. This posed significant issues especially to the German and Irish Americans who were the two largest ethnic groups in the city in the 1900 census with over 300,000 and 275,000 individuals born in Germany and Ireland respectively.[[107]](#footnote-107) As a means of forging responsible citizens for this agenda, the Museum of Safety utilised its position to promote loyalty to the nation in a statement published in its journal.[[108]](#footnote-108)

By 1916, Arthur Williams had orientated the museum to be a strong proponent of the Preparedness Movement and advocated an investment in safety to ensure the health of the population who might be called upon to serve their country.[[109]](#footnote-109) Williams also echoed the increasing anti-German sentiment within the city by drawing comparisons to the ruins of institutions of learning, caused by an advancing German Army in France and Belgium, with the possible destruction that would be visited upon the Museum of Natural History, the Metropolitan Museum of Art or the Museum of Safety in the event of a German invasion.[[110]](#footnote-110) In this context, the third exposition of sanitation and safety devices, held in Grand Central Palace during May 1916, was dominated by displays of military hygiene and camp sanitation.[[111]](#footnote-111) This dedication to the nation was undertaken during a shift in the control of the museum which saw the ousting of Tolman as Director in November 1916, whose German connections dating back to the Paris Exposition cast him as suspicious in the febrile atmosphere of the time.[[112]](#footnote-112) By January 1917, the museum had appointed Arthur H. Young, formerly of the National Safety Council, as the new Director. Young, as a former safety inspector of the Illinois Steel Company in Chicago, had been concerned with the ‘safety first’ movement not as a means of education and reform through exhibition but as a means by which productivity could be maintained.[[113]](#footnote-113)

Under the new directorship, the Museum of Safety continued in its work but the focus of its concern began to shift away from exhibitions and displays which was seen as inefficient and out-dated. Increasingly, public talks, films and reports were utilised as the primary mode of engagement as the museum’s income from memberships began to stagnate as new patrons within industry and private individuals were not forthcoming.[[114]](#footnote-114) Whilst earning over $20,000 annually from subscriptions, the museum operated as a non-profit organisation with no investments made from its earnings.[[115]](#footnote-115) In such straightened circumstances, *Safety*,the chief publication of the museum began to be issued in bi-monthly editions or go unpublished during the summer months. The museum, nevertheless, continued to support the war effort, offering the use of its facilities and staff after the declaration of war against Germany in April 1917.[[116]](#footnote-116) However, the declining prestige of the institution was evident in the necessity of the National Safety Council to co-sponsor the exposition of safety devices at Grand Central Palace in September 1917.[[117]](#footnote-117) This event enabled the stark difference in the fortunes of these two organisations to be observed, as the National Safety Council’s national prestige and annual budget of over $100,000 ensured its dominance over its collaborator in promoting safety issues.[[118]](#footnote-118)

By the summer of 1918, the museum’s board sought to end the organisation’s problems by applying to occupy the Arsenal Building on Fifth Avenue and 64th Street in Central Park as their permanent home. The location was significant; Central Park linked the two great institutions of learning within New York, the Metropolitan Museum of Art and the Natural History Museum. The application was received favourably by the Board of Estimate and Apportionment who were desirous of removing the cost of the care and renovation of the Arsenal from the city’s budget. However, the plans were criticised in the city’s press as an ‘invasion’ of the Central Park; the museum appeared not to represent the qualities sought to warrant a home in such an exalted position.[[119]](#footnote-119) The acquisition of support and the drawing up of a lease by the Board of Estimate and Apportionment in the summer of 1918 brought further assessment of the museum’s actual role and value within the city.[[120]](#footnote-120) This appraisal saw the ending of the tenure as director of Arthur H. Young in July 1918 and a successful application by the museum’s board members to rename the museum as the Safety Institute of America in November 1918.[[121]](#footnote-121) The change was undertaken to assert their role in ‘modern’ social engagement which the appellation ‘museum’ did not apparently afford:

While the old name appealed to numerous friends…nevertheless the title led to misconceptions on the part of many others who thought of the Museum as a repository of historical objects and not as a modern and progressive economic movement.[[122]](#footnote-122)

A museum dedicated to safety was not modern enough; exhibitions and displays were seemingly unsuited to the progressive ideals of responsibility and awareness. In their new guise, the Safety Institute continued to hold lectures and seminars in early 1919 as part of their public remit.[[123]](#footnote-123) However, the problems in securing the museum’s permanent home meant that these lectures were held in the offices of the Metropolitan Life Building. The Institute had been forced to vacate the property at 14-18 West 29th Street in April 1919 in the expectation that it would take up residency at the Central Park Arsenal. However, despite a favourable court decision in July 1919, on appeal in June 1920 the decision of the Board of Estimate and Apportionment was rejected and the Institute was refused permission to occupy the Arsenal.[[124]](#footnote-124) In this judgement, the Institute’s proposals were regarded as lacking in the ability to maintain a lasting contribution to the park and the city and, quite damningly, the Institute’s objectives were described as failing ‘to accomplish its corporate purpose.’[[125]](#footnote-125) The organisation had failed to demonstrate its reforming, modernising objectives as an ongoing concern for the wider metropolis. The Institute was rendered homeless with this decision and was forced to rent offices at 261 Madison Avenue and disperse the collections built up as a museum because of the absence of storage.[[126]](#footnote-126) The death of Carnegie in 1919 had also brought a reduction in income as the Carnegie Corporation began to focus upon scientific programmes which the new Institute was not regarded as fulfilling. The Institute was eventually incorporated into the wider role of the National Safety Council, as the operation of safety initiatives within the city was undertaken as a joint initiative.[[127]](#footnote-127) With an ever decreasing publication of *Safety* and a declining role within the metropolis, the Institute had failed to convince individuals, corporations and the city authorities of its relevance.

The decline in the Institution’s fortunes did not entail an absence of concern for safety in the metropolis. Indeed, with ever-increasing numbers of automobiles within New York, from 71,000 licensed vehicles in 1915 to 213,000 in 1920, a new wave of engagement concerning the protection of children from car accidents emerged during the early 1920s.[[128]](#footnote-128) Nationally, fatalities in connection with automobiles were increasing at a rapid rate with 9.4 per 100,000 deaths in 1919 to 10.4 in 1920.[[129]](#footnote-129) In New York, over 700 deaths a year caused by automobiles were being reported by 1920.[[130]](#footnote-130) The cause of traffic safety, one which exercised the interests of the city and national media, offered a means by which the directors of the Institute would potentially restate its utility and status.[[131]](#footnote-131) With this cause in mind, in January 1922 the Institute’s bulletin *Safety* was relaunched with a commitment to monthly editions and a move was made to resurrect the ‘American Museum of Safety’. This was undertaken with the appointment of the new director, Laurence Vail Coleman (1893-1982), who, as a former employee of the Museum of Natural History, had led on its public health exhibitions. Coleman was a keen advocate of the educational value of exhibitions.[[132]](#footnote-132) Under this guidance, the organisation’s displays were revitalised, objects were loaned and exhibits were bought as new rented premises were found in 141 East 29th Street. Foremost in this activity was the subject of street accidents and during the summer of 1922 plans were set in place to organise a citywide ‘Safety Week’ to draw attention to the threats in the modern metropolis.[[133]](#footnote-133) (Fig.3) This event, designed to encourage awareness was also intended as a demonstration of the role of the Museum of Safety:

...the value of the museum as a “totem” must not be overlooked. By standing as a visible monument to an abstraction it will be a rallying point for safety workers and a source of conviction to the uninitiated who give no thought to what they cannot see. The future of the museum is therefore both a local and a national concern.[[134]](#footnote-134)

(INSERT FIGURE 3 HERE)

Under the directorship of Coleman, the museum’s ‘Safety Week’ was planned as a grand event, with parades, speeches, monuments and the founder of U.S. Steel, E.H. Gary (1846-1927), as chairman of the planning committee.[[135]](#footnote-135) From October 9 to October 13, the city was enthralled with declarations of the significance of installing an appreciation of safety into the schools, factories, offices and homes of all residents of New York.[[136]](#footnote-136) These five days raised safety as an agenda within the city, as the threat to life, the cost of injury and the waste caused by accidents was debated within the metropolis. However, rather than resulting in the expected drive for the reinstallation of the museum, the effect was to encourage the formation of a Bureau of Public Safety within the city’s police department to enforce ordinances and regulations regarding health and welfare.[[137]](#footnote-137) The public clamour to ensure safety in the city was met not with exhibitions and displays to educate but through an extra level of policing and control. Whilst the Institute formally reverted its name back to the American Museum of Safety in 1923, the organisation had ceased to operate as a functional service and was reduced to a small collection of photographs and a library housed in an office on 60 East 42nd Street by 1926.[[138]](#footnote-138)

The potential municipal role of the museum was further undermined by the development of the Center for Safety Education at New York University during the 1920s and 1930s. This educational facility provided reports on the physical welfare provisions of industries across the city and the wider nation whilst also providing courses on the prevention of accidents and the implementation of safety procedures. The ‘Museum of Safety’ continued in some form until the 1970s, but its decline represented the distinct shift in how New York and wider society across the United States would modernise in response to social, industrial or technological innovations. An institution, born out of a desire to reform, had used exhibitions and displays to inform and educate the populace on the principle of safety and responsibility. It sought to fashion individuals with the knowledge to preserve life and limb and secure the social contract between citizens, corporations and government. However, this means of engaging the public on points of health and safety through a museum appeared increasingly inappropriate as the twentieth century progressed. The concern of safety in the city did not diminish; the energy and ideals of the safety movement were not lost as the museum faded from relevance. Rather, the museum failed to adapt sufficiently for its subject matter and for its visitors. In the schemes of institutions which sought to shape American life from the 1880s onwards, the forces of modernisation could render museums, libraries and galleries to the periphery. In this manner, a museum founded in the ‘Progressive Era’ and orientated towards the future became irrelevant and anachronistic.

**Conclusions**

At the outset of the twentieth century, New York was beset by problems of health and safety that threatened the lives of citizens but also the democratic structures of the metropolis as the apparent absence of responsibility amongst individuals, industries and government was regarded as a potential cause of political radicalism and discontent. This provided the background for the development of the Museum of Safety in New York which intended to reform society through a greater regard for responsibility and awareness. Indeed, the institution attempted to direct the formation of a ‘modern’ agenda within the city and the wider nation. Forward-looking and based on social stability, the museum aimed to reshape society for the future. Whilst initially successful in its objectives after its creation in 1908, the Museum struggled to attract the same level of recognition afforded to the institutions which dominated the cultural life of the metropolis. Nevertheless, the international expositions, reports, awards and displays that the Museum of Safety produced or promoted served to inform and inculcate standardised and appropriate behaviours within industrial contexts to ensure the wellbeing of individuals.

However, the role of the institution as a ‘museum’ ensured that its board members faced continuing difficulties in demonstrating the progressive purpose and outlook of the organisation. Increasingly, other means of engagement, including lectures and films, were used to disseminate the message of the institution. As a museum, it functioned as a tool to encourage and govern behaviour, but with a matter so entwined with progression and advancement, displays and exhibitions could not provide an appropriate setting. This is evident in that the concern for implementing safety procedures after the museum’s decline fell to the municipal authorities and educational institutions. It was these modes of control and communication which provided a means by which the safety agenda could be implemented. As the concept of safety and risk management signifies a concern for the future, a ‘museum’ of safety could not adequately reflect the social and industrial alterations which had called for its creation. The Museum of Safety, its creation and its failure, represented the changes present with the advent of the modern age in early twentieth century American society.

1. Arwen Mohun, *Risk: Negotiating Safety in American Society* (Baltimore: Johns Hopkins University Press, 2012), 141-148. Mark Aldrich, *Safety First: Technology, Labor, and Business in the Building of American Work Safety, 1870-1939* (Baltimore: Johns Hopkins University Press, 1997), 76-77. [↑](#footnote-ref-1)
2. Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992). Anthony Giddens, “Risk and Responsibility,” *Modern Law Review*, 62, 1 (1999), 1-10. [↑](#footnote-ref-2)
3. David Murray, *Museums: their history and their use* (Glasgow: J. MacLehose, 1904). [↑](#footnote-ref-3)
4. Neil Harris, “The Gilded Age Revisited: Boston and the Museum Movement,” *American Quarterly*, 14, 4 (1962), 545-566. Neil Harris, “Cultural Institutions and American Modernization,” *The Journal of Library History* 16, 1 (1981), 28-47. Neil Harris, *Cultural Excursions: Marketing Appetites and Cultural Tastes in Modern America* (Chicago: The University of Chicago Press, 1990). [↑](#footnote-ref-4)
5. Steven Conn, *Museums and American Intellectual Life, 1876-1926* (Chicago: The University of Chicago Press, 1998). Lawrence Levine, *Highbrow/Lowbrow: The Emergence of Cultural Hierarchy in America* (Cambridge: MA: Harvard University Press, 1988). Jesús Pedro Lorente, *Cathedrals of urban modernity: the first museums of contemporary art, 1800-1930* (Farnham: Ashgate, 1998). David Martin, *Curious Visions of Modernity: Enchantment, Magic, and the Sacred* (Cambridge: MA: The MIT Press, 2011). Nick Prior, *Museums and Modernity: Art Galleries and the Making of Modern Culture* (Oxford: Berg, 2002). Mark B. Sandberg, *Living Pictures, Missing Persons: Mannequins, Museums, and Modernity* (Princeton: Princeton University Press, 2003). Jeffrey Trask, 2012. *Things American: Art Museums and Civic Culture in the Progressive Era* (Philadelphia: University of Pennsylvania Press, 2015). [↑](#footnote-ref-5)
6. Ivan Karp, Christine Mullen Kreamer, Steven Levine, eds., *Museums and Communities: The Politics of Public Culture* (Washington, DC: Smithsonian Institution Press, 1992). Warren Leon and Roy Rosenzweig, eds., *History Museums in the United States: A Critical Assessment* (Urbana: University of Illinois Press, 1989). [↑](#footnote-ref-6)
7. Alan Dawley, *Struggles for Justice: Social Responsibility and the Liberal State* (Cambridge: MA: Harvard University Press, 1991). Lewis Gould, ed., *The Progressive Era* (Syracuse: NY: Syracuse University Press, 1974). Arthur S. Link and Richard L. McCormick, *Progressivism* (Arlington Heights: Harlan Davidson, 1983). Robert Wiebe, *The Search for Order, 1877-1920* (New York: Hill and Wang, 1967). [↑](#footnote-ref-7)
8. David P. Thelen, “Social Tensions and the Origins of Progressivism,” *Journal of American History*, 56 (1969), 323-341. [↑](#footnote-ref-8)
9. Robert D. Johnson, “Re-Democratizing the Progressive Era: The Politics of Progressive Era Political Historiography,” *Journal of the Gilded Age and Progressive Era*, 1, 1 (2002), 68-92. [↑](#footnote-ref-9)
10. Steven J. Diner, *A Very Different Age: Americans of the Progressive Era* (New York: Hill and Wang, 1998). [↑](#footnote-ref-10)
11. David Huyssen, *Progressive Inequality Rich and Poor in New York, 1890-1920* (Cambridge: Harvard University Press, 2014). [↑](#footnote-ref-11)
12. Ira Rosenwaike, *Population History of New York City* (Syracuse: NY: Syracuse University Press, 1972), 63. [↑](#footnote-ref-12)
13. Ben Singer, “Modernity, Hyperstimulus, and the Rise of Popular Sensationalism,” in Charney and Schwartz, eds., *Cinema and the Invention of Modern Life* (Berkeley: University of California Press, 1995) 72-95. [↑](#footnote-ref-13)
14. Health Department of the City of New York, *Annual report of the Board of Health of the Health Department of the City of New York* (New York: Martin B. Brown, 1901), 53. [↑](#footnote-ref-14)
15. Randolph Bergstrom, *Courting Danger: Injury and Law in New York City, 1870-1910* (Ithaca: NY: Cornell University Press, 1993). [↑](#footnote-ref-15)
16. “$100,000 for wife’s death,” *New York Times*, 30 Jun. 1900, 14. “Nobody held for murder,” *Brooklyn Eagle*, 7 Jul. 1900, 22. [↑](#footnote-ref-16)
17. See Jacob Riis, *How the Other Half Live* (New York: Charles Scribner’s Sons, 1890), 12. [↑](#footnote-ref-17)
18. Roy Lubove, *The Progressives and the Slums: Tenement House Reform in New York City, 1890-1917* (Pittsburgh: University of Pittsburgh Press, 1962), 23. [↑](#footnote-ref-18)
19. Census Office, *Abstract of the Twelfth Census* (Washington, DC: Government Printing Office, 1900), 107. [↑](#footnote-ref-19)
20. Dorothea R. Muller, “Josiah Strong and American Nationalism: A Reconsideration,” *Journal of American History*, 53 (1966), 487-503. [↑](#footnote-ref-20)
21. Donald Gorrell, *The Age of Social Responsibility: the Social Gospel in the Progressive Era, 1900-1920* (Macon: Mercer University Press, 1988). Robert Handy, ed., *The Social Gospel in America, 1870-1920* (Oxford: Oxford University Press, 1966). [↑](#footnote-ref-21)
22. Josiah Strong, *Our Country: its possible future and its present crisis* (New York: The Baker & Taylor Co., 1885), 129-130. [↑](#footnote-ref-22)
23. Josiah Strong, *The New Era or The Coming Kingdom* (New York: The Baker & Taylor Co., 1893), 182-183. [↑](#footnote-ref-23)
24. Josiah Strong, *Expansion under new-world conditions* (New York: The Baker & Taylor Co., 1900), 214. [↑](#footnote-ref-24)
25. Walter Rauschenbusch, *Christianity and the social crisis* (New York: Macmillan Company, 1907), 343. [↑](#footnote-ref-25)
26. Josiah Strong, *Religious movements for social betterment* (New York: The Baker & Taylor Co., 1900), 14-15. [↑](#footnote-ref-26)
27. League for Social Service, *Prospectus* (New York: League for Social Service, 1898). [↑](#footnote-ref-27)
28. William Tolman, “The League for Social Service,” *Arena*, 21 (1899), 474. [↑](#footnote-ref-28)
29. Tony Bennett, *The Birth of the Museum* (London: Routledge, 1995). Eileen Hooper Greenhill, *Museums and the Shaping of Knowledge* (London: Routledge, 1992). [↑](#footnote-ref-29)
30. Paul DiMaggio, “Cultural Entrepreneurship in Nineteenth-Century Boston: The Creation of an Organizational Base of High Culture in America,” *Media, Culture and Society*, 5 (1982), 33-50. [↑](#footnote-ref-30)
31. Neil Harris, “Museums, merchandizing and popular taste,” in Quimby, ed., *Material Culture and the Study of American Life* (New York: Norton and Co., 1978), 140-174. [↑](#footnote-ref-31)
32. Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge: MA: The MIT Press, 1992). Karen A. Rader and Victoria E. M. Cain, *Life on Display: Revolutionizing US Museums of Science and Natural History in the Twentieth Century* (Chicago: The University of Chicago Press, 2014). [↑](#footnote-ref-32)
33. Winifred Howe, *A History of the Metropolitan Museum of Art* (New York: The Metropolitan Museum of Art, 1913). Henry Osborn, *History, plan and scope of the American Museum of Natural History* (New York: The Irving Press, 1910). [↑](#footnote-ref-33)
34. Maren Stange, “Jacob Riis and Urban Visual Culture: the lantern slide exhibition as entertainment and ideology,” *Journal of Urban History* 15, 3 (1989), 274-303. [↑](#footnote-ref-34)
35. Lawrence Veiller, “The Tenement-House Exhibition of 1899,” *Charities Review*, 10 (1900-1901), 19-25. [↑](#footnote-ref-35)
36. “For a social museum here,” *New York Times*, 25 Feb. 1900, 12; “The Social Economy Exhibit,” *Brooklyn Eagle*, 29 Mar. 1900, 5. [↑](#footnote-ref-36)
37. William Tolman, *Municipal Reform Movements in the United States* (New York: Fleming H. Revell company, 1895). William Tolman and William Hull, *Handbook of Sociological Information with Especial Reference to New York City* (New York: G.P. Putnam’s Sons, 1894). [↑](#footnote-ref-37)
38. William Tolman, “Social Economics in the Paris Exposition,” *The Outlook*, 6 (1900), 312-315 [↑](#footnote-ref-38)
39. “Private view of the social economic exhibit for Paris exposition,” *New York Tribune*. 4 Mar. 1900, 5. [↑](#footnote-ref-39)
40. Daniel Rodger, *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge: Harvard University Press, 2000), 10. [↑](#footnote-ref-40)
41. Richard Waterman, *The social economy exhibit at the Paris exposition of 1900* (Boston: MA: Wright and Potter, 1900). [↑](#footnote-ref-41)
42. William Tolman, “The Musée social, Paris, and the League for Social Service, New York,” *Social Service*, 3-4 (1901), 27-29. [↑](#footnote-ref-42)
43. Musée social, *Obsèques du comte de Chambrun, fondateur du Musée social. 1821-1899* (Paris: A. Rousseau, 1899). [↑](#footnote-ref-43)
44. Musée social, *Le Musée social: Fondation de Chambrun* (Paris: A. Rousseau, 1904). [↑](#footnote-ref-44)
45. Thomas Twining, *Science for the People: a memorandum on various means for propagating scientific and practical knowledge among the working classes, and for thus promoting their physical, technical, and social improvement* (London: C. Goodman, 1870). [↑](#footnote-ref-45)
46. Leopold Katscher, “Modern Labor Museums,” *Journal of Political Economy*, 14, 4 (1906), 224-235. [↑](#footnote-ref-46)
47. Stefan Poser, *Museum der Gefahren* (Waxmann: Münster, 1998); Olaf Hartung, *Museen des Industrialismus* (Böhlau Verlag: Köln, 2007). [↑](#footnote-ref-47)
48. Patrick Geddes, *Industrial Exhibitions and Modern Progress* (Edinburgh: D. Douglas, 1887). [↑](#footnote-ref-48)
49. Patrick Geddes, “The Closing Exposition - Paris, 1900,” *Contemporary Review*, 77 (1900), 653-668. [↑](#footnote-ref-49)
50. Letter from Josiah Strong to Patrick Geddes, University of Strathclyde Archives, GB 249 T-GED/7/9/257. Postcard from William Tolman to Patrick Geddes. University of Strathclyde Archives, GB 249 T-GED/7/9/259. [↑](#footnote-ref-50)
51. “A Social Museum for New York,” *New York Times*, 13 Apr. 1902, 30. [↑](#footnote-ref-51)
52. William Tolman, *The better New York* (New York: The Baker & Taylor Co., 1904). [↑](#footnote-ref-52)
53. “First International Exposition of Safety Devices and Industrial Hygiene,” *Brooklyn Life*, 19 Jan. 1907, 4. [↑](#footnote-ref-53)
54. “New National Movement to Bo Inaugurated at a Banquet,” *Brooklyn Eagle*, 3 Jan. 1907, 12. [↑](#footnote-ref-54)
55. “An Exposition of Safety Devices and Industrial Hygiene,” *Scientific American*, 96, 4 (1907), 93-94. [↑](#footnote-ref-55)
56. “Governor Hughes urges protection of toilers,” *New York Times*, 29 Jan. 1907, 3. [↑](#footnote-ref-56)
57. “Governor Hughes’ stand against waste of men,” *Brooklyn Eagle*, 26 Jan. 1907, 7. [↑](#footnote-ref-57)
58. William Tolman, “The American Museum of Safety Devices and Industrial Hygiene,” *Scientific American*, 96, 1 (1907), 421. [↑](#footnote-ref-58)
59. William Tolman, “Safety for American Life and Labor,” *American Industries*, 7 (1908), 10. [↑](#footnote-ref-59)
60. Josiah Strong, “A museum of safety devices and industrial hygiene,” *The Homiletic Review*, l (1908), 193-194. [↑](#footnote-ref-60)
61. “Safety Devices Exposition Open,” *New York Times*, 12 Apr. 1908, 7. [↑](#footnote-ref-61)
62. “Showing employers how to protect their workmen,” *Brooklyn Eagle*, 22 Mar. 1908, 6. [↑](#footnote-ref-62)
63. Julie K. Brown, “Connecting Health and Natural History: A Failed Initiative at the American Museum of Natural History, 1909-1922,” *American Journal of Public Health*, 104, 10 (2014), 1877-1888. [↑](#footnote-ref-63)
64. Anon, “The engineering building of New York City,” *Popular Science*, 68 (1906), 567-570. [↑](#footnote-ref-64)
65. Carnegie Endowment, *A manual of the public benefactions of Andrew Carnegie* (Washington, DC: Carnegie Endowment for International Peace, 1919), 204-205. [↑](#footnote-ref-65)
66. William Tolman, *Social Engineering* (New York: McGraw, 1909), 116-117. [↑](#footnote-ref-66)
67. American Museum of Safety, *Plan and Scope* (New York: American Museum of Safety, 1909). [↑](#footnote-ref-67)
68. William Tolman, “An American museum of safety,” *Metropolitan Magazine* (July 1910), 509-518. [↑](#footnote-ref-68)
69. New York State, *Laws of the State of New York, Vol.1* (Albany: J.B. Lyon, 1911), 244. [↑](#footnote-ref-69)
70. “Startled by city’s dangers”, *New York Times*, 11 Apr. 1911, 10. [↑](#footnote-ref-70)
71. Daniel Nelson, *Managers and Workers: Origins of the Twentieth-Century Factory System in the United States, 1880-1920* (Madison: University of Wisconsin Press, 1975), 32-33. [↑](#footnote-ref-71)
72. New York Factory Investigating Commission, *Preliminary Report, Vol. II* (Albany: J.B. Lyon, 1912), 487-500. [↑](#footnote-ref-72)
73. William Tolman, *Alcohol in Industry* (New York: American Museum of Safety, 1912); William Tolman, *Yard Practice, walks and railings* (New York: American Museum of Safety, 1912); William Tolman, *Foundry Practice* (New York: American Museum of Safety, 1912). [↑](#footnote-ref-73)
74. William Tolman and Leonard Kendall, *Safety: Methods for preventing occupational and other accidents and disease* (New York: Harper & Brothers, 1913). [↑](#footnote-ref-74)
75. “Croker in Safety Museum,” *New York Times*, 15 May 1911, 16. [↑](#footnote-ref-75)
76. David Rosner and Gerald Markowitz, eds., *Dying for Work: Workers’ Safety and Health in Twentieth-century America* (Bloomington: Indiana University Press, 1987). [↑](#footnote-ref-76)
77. “Safety Show Programme,” *New York Times*, 15 Dec. 1913, 5. [↑](#footnote-ref-77)
78. Anon, “Safety Exposition sets new standard,” *Safety*, 2, 1 (1914), 3-5. [↑](#footnote-ref-78)
79. William Tolman and Adelaide Wood Guthrie, *Hygiene for the Worker* (New York: American Book Company, 1912), 202. [↑](#footnote-ref-79)
80. Department of Education, *Minutes of the Board of Superintendents* (New York: N.S., 1913), 49. [↑](#footnote-ref-80)
81. “Safety day in schools,” *New York Times*, 5 Apr. 1913, 9. [↑](#footnote-ref-81)
82. William Tolman, “Safety, Always,” *Technograph*, 29 (1914), 46-53. [↑](#footnote-ref-82)
83. “Safety Day in public schools,” *Brooklyn Eagle*, 4 Apr. 1913, 18. [↑](#footnote-ref-83)
84. “Schoolgirls study first aid to injured,” *New York Times*, 11 May 1913, 4. [↑](#footnote-ref-84)
85. American Museum of Safety, *Hans, Bright Eyes and Fleet of Foot* (New York: American Museum of Safety, 1913); American Museum of Safety, *Never Touched Me* (New York: American Museum of Safety, 1913); American Museum of Safety, *The Little Girl who Didn’t Think* (New York: American Museum of Safety, 1913). [↑](#footnote-ref-85)
86. “Museum of Safety to award medals,” *New York Times*, 7 Dec. 1913, 119. [↑](#footnote-ref-86)
87. Anon, “Safety Exposition sets new standard,” *Safety* 2, 1 (1914), 3-5. [↑](#footnote-ref-87)
88. United States Patent Office, *Official gazette of the United States Patent Office* (Washington, DC: Government Printing Office, 1914), lxix. [↑](#footnote-ref-88)
89. “Nation moves to safeguard human life and limb,” *New York Tribune*, 7 Jun. 1914, 46. [↑](#footnote-ref-89)
90. “Federal Museum of Safety,” *Brooklyn Eagle*, 25 Jul. 1914, 6. [↑](#footnote-ref-90)
91. New York State, *General laws of the state of New York*, *136th session* (St. Paul: West Publishing Co., 1914), 574-575. [↑](#footnote-ref-91)
92. Board of Estimate and Apportionment, *Minutes* *of the Board of Estimate and Apportionment (October)* (New York: M.B. Brown, 1914), 6904. [↑](#footnote-ref-92)
93. Board of Estimate and Apportionment, *Expense* *Budget for 1914: City of New York* (New York: M.B. Brown, 1914). [↑](#footnote-ref-93)
94. Anon, “Public Support for a Public Institution,” *Safety* 2, 5 (1914), 105. [↑](#footnote-ref-94)
95. Anon, “How the New York Edison Company Provides for the Safety of its Employees,” *Safety* 2, 7 (1914), 158-163. [↑](#footnote-ref-95)
96. “Safety exposition opened to the public”, *New York Times*, 13 Dec. 1914, 14. [↑](#footnote-ref-96)
97. “Urges peace work by safety museums”, *New York Times*, 18 Dec. 1914, 14. [↑](#footnote-ref-97)
98. Museum of Safety, *Sidewalk and street accidents other than vehicular* (New York: N.S., 1915). [↑](#footnote-ref-98)
99. Frederick Hutton, “Safety may be defined as the condition or state in which a man or a thing is shielded from harm,” *Safety* 2, 1 (1914), 251-254. [↑](#footnote-ref-99)
100. National Council for Industrial Safety, *Proceedings of the National Council for Industrial Safety: Second Safety Congress* (Chicago: National Safety Council, 1914). [↑](#footnote-ref-100)
101. Anon, “The Museum’s New Quarters,” *Safety* 3, 3 (1915), 65. [↑](#footnote-ref-101)
102. Frederick Hutton, “A Salutation,” *Safety* 3, 4 (1915), 93-95. [↑](#footnote-ref-102)
103. Arthur Williams, Its History, Aims, and an Interpretation of Its Signals,” *New York Times*, 28 Sep. 1915, 10. [↑](#footnote-ref-103)
104. Anon, “The Museum opens its new quarters to the public,” *Safety* 3, 5 (1915), 120-121. [↑](#footnote-ref-104)
105. Carl Gregory, dir., *An American in the Making* (Thanhouser Film Corporation, 1913). Tefft Johnson, dir., *The Locked Door* (Vitagraph Company of America, 1914); Marcus Dow, dir., *Steve Hill’s Awakening* (Marcus Dow Productions, 1914). [↑](#footnote-ref-105)
106. Ross Wilson, *New York and the First World War: shaping an American city* (Farnham: Ashgate, 2014). [↑](#footnote-ref-106)
107. Census Office, *Abstract of the Twelfth Census* (Washington, DC: Government Printing Office, 1900), 107. [↑](#footnote-ref-107)
108. Anon, “Preparedness,” *Safety* 3, 8 (1915), 189. [↑](#footnote-ref-108)
109. “35,000 workers killed,” *New York Times*, 9 Apr. 1916, 3. [↑](#footnote-ref-109)
110. Arthur Williams, “Preparedness - Some Suggestions,” *The Scientific Monthly*, 2, 4 (1916), 396-402. [↑](#footnote-ref-110)
111. “For Safety Exposition,” *Brooklyn Eagle*, 15 May (1916), 8. [↑](#footnote-ref-111)
112. “Tolman sues museum,” *New York Times*, 11 Nov. (1916), 4. [↑](#footnote-ref-112)
113. Anon, “American Museum of Safety,” *Safety Engineering*, 32 (1916), 347-348. [↑](#footnote-ref-113)
114. Anon, “Expenditure and Income Account, for the year ending December 31, 1916,” *Safety*, 5, 2 (1917), 44. [↑](#footnote-ref-114)
115. Anon, “Expenditure and Income Account, for the year ending December 31, 1917,” *Safety*, 6, 2 (1918), 46. [↑](#footnote-ref-115)
116. “Museum of Safety to aid,” *New York Times*, 8 Apr. (1917), 5. [↑](#footnote-ref-116)
117. “Safety Exposition Open,” *Brooklyn Eagle*, 11 Sep. (1917), 2. [↑](#footnote-ref-117)
118. Marcus Dow, “The Progress and Possibilities of Accident Prevention Work,” *Safety Engineering*, 34 (1917), 192-197. [↑](#footnote-ref-118)
119. “New park invaders ask use of Arsenal,” *New York Times*, 14 Jun. (1918), 11. [↑](#footnote-ref-119)
120. “City turns Arsenal over to a museum,” *New York Times*, 22 Jun. (1918), 2. [↑](#footnote-ref-120)
121. “Safety Museum changes name,” *New York Times*, 30 Nov. (1918), 10. [↑](#footnote-ref-121)
122. Anon, “The Safety Institute of America,” *Safety*, 7, 1 (1919), 1-2. [↑](#footnote-ref-122)
123. Safety Institute of America, *Safety Fundamentals* (New York: Safety Institute of America, 1920). [↑](#footnote-ref-123)
124. “Must keep park for park business,” *New York Times*, 27 Jun. (1920), 2. [↑](#footnote-ref-124)
125. Anon, “The dedication and uses of parks,” *Columbia Law Review* 20, 6 (1920), 687-688. [↑](#footnote-ref-125)
126. Anon, “The Institute’s New Quarters,” *Safety* 8, 1-2 (1920), 2. [↑](#footnote-ref-126)
127. Anon, “Metropolitan Safety Council,” *Safety* 8, 1-2 (1920), 2-3. [↑](#footnote-ref-127)
128. New York Chamber of Commerce, *Annual Report of the Corporation of the Chamber of Commerce of the State of New York* (New York: Press of the Chamber of Commerce, 1921), 215. [↑](#footnote-ref-128)
129. Anon, “Principal Causes of Death in the United States Registration Area, 1920: Census Bureau’s Summary of Mortality Statistics,” *Public Health Reports*, 36, 44 (1921), 2723-2725. [↑](#footnote-ref-129)
130. Department of Health, *Annual report of the Board of Health of the Health of the City of New York* (New York: Department of Health, 1920), 305. [↑](#footnote-ref-130)
131. “Automobile Death Toll 12,500 in 1921,” *New York Times*, 1 Jul. (1922), 4. [↑](#footnote-ref-131)
132. Anon, “The New Director of the Safety Institute,” *Safety*, 9, 1 (1922), 2. [↑](#footnote-ref-132)
133. “Gary to lead city in safety campaign,” *New York Times*, 27 Jul. (1922), 10. [↑](#footnote-ref-133)
134. Anon, “The American Museum of Safety and its Significant,” *Safety*, 9, 6 (1922), 130-132. [↑](#footnote-ref-134)
135. Laurence Coleman, “The Story of Safety Week,” *Safety*, 9, 11 (1922), 209-220. [↑](#footnote-ref-135)
136. “Safety week opens with ‘no death’ day,” *New York Times*, 9 Oct. (1922), 2. [↑](#footnote-ref-136)
137. Barron Collier, *Stopping Street Accidents: a history of New York City’s Bureau of Public Safety* (New York: Tabard Press, 1922). [↑](#footnote-ref-137)
138. Charles Close, “Industrial Safety,” *Annals of the American Academy of Political and Social Science*, 123 (1926), 86-92. [↑](#footnote-ref-138)