

'The Compensation Law Put Us Out of Work': Workplace Injury Law,
Commodification, and Discrimination in the Early 20th Century United States

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“Averages are insults and injuries against real, singular individuals.”
- Karl Marx¹

¹ Karl Marx, *Marx-Engels Gesamtausgabe: Vierte Abteilung IV. Exzerpte, Notizen, Marginalien. Band 2* (Berlin: Dietz Verlag, 1981), 480. My translation.

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“Skin’s a thing that at all times can be converted into dollars.”
- Bertolt Brecht¹

Introduction

“In Chicago during the past year,” wrote the *Chicago Daily News* in a 1906 editorial, “according to figures compiled by the Bridge and Structural Iron Workers’ Union, 147 of its 1,358 members were either killed or disabled by accidents while at work. Thirty-four men lost their lives, thirteen were totally disabled, and 100 were partially disabled.” This meant that approximately eleven percent of these construction workers suffered serious injury and just under three percent died in one year of normal work.² The Structural Iron Workers injury rates were high, but in keeping with employee injuries in the early twentieth century. The annual rate of workers killed on the job ranged from one in 1,000 to one in 300, with non-fatal injury rates running substantially higher. Statistician Isaac Rubinow estimated that “there must be some 60,000 crippling injuries each year,” such that a full ten percent of the 18 million U.S. wage earners “must sooner or later suffer not only bodily injury but even mutilation” during their working lives.³ People who worked for wages put their bodies and lives on the line regularly in this era.

In another *Daily News* editorial three weeks later, Illinois State Senator Edward J. Glackin invoked structural iron workers, noting that these men “risk their lives for the people” by building the infrastructure required by American industry and society. Too

¹ “Mahagonny Song 2,” in Bertolt Brecht, *Manual of Piety*, translated by Eric Bentley (New York: Grove Press, 1994), 189.

² *Chicago Daily News*, November 21, 1906, 1.

³ Isaac Max Rubinow, *Social Insurance: With Special Reference to American Conditions* (New York: Holt, 1913), 61, 68. Rubinow noted that his figures included only those injuries that removed body parts from the injured person; the total number of injuries was even higher.

often these workers suffered injuries and were “brought home crippled and unable to care for” their financial dependents because their wages “stop the moment the accident occurs,” leading to tremendous disruptions in their and their families’ lives. Glackin here framed the problem of injury as a matter of income.⁴

As of 1914, twenty-three states had enacted the kind of solution that Glackin had called for in his editorial, in the form of workmen’s compensation laws.⁵ While policymakers intended these laws to alleviate the economic insecurity produced by employee injury, by 1914 critics had begun pointing out that compensation laws had created new economic insecurity for many wage-earners and their families. *The American Underwriter Magazine and Insurance Review* posed “Certain Grave Questions of Workmen’s Compensation,” namely “Will it Lead to Discrimination Against Married Men and Slightly Impaired Lives?”⁶ Many working people answered these “grave questions” affirmatively, declaring in protest “The Compensation Law Put Us Out of Work.”⁷ While compensation laws provided greater financial security for many businesses, wage earners, and their families, this security came at the expense of

⁴ *Chicago Daily News*, December 10, 1906, 2.

⁵ For a summary of when states adopted workmen’s compensation laws, see Shawn Everett and Price V. Fishback, “How Minnesota Adopted Workers’ Compensation,” *The Independent Review* vol. 2, no.4 (1998): 557-578. I say “workmen’s” compensation throughout this dissertation because that was what the laws were called at the time of their creation. For a discussion of the gendered character of workmen’s compensation laws, see Barbara J. Nelson, “The Origins of the Two-Channel Welfare State: Workmen’s Compensation and Mothers’ Aid,” in *Women, the State and Welfare*, ed. Linda Gordon, Madison: University of Wisconsin Press, 1990, 123-151.

⁶ Edward Bunnell Phelps, “Certain Grave Questions of Workmen’s Compensation: Will it Lead to Discrimination Against Married Men and Slightly Impaired Lives?” *The American Underwriter Magazine and Insurance Review* vol. 42, no.1 (July, 1914): 1-10, 3.

⁷ *Los Angeles Times*, Feb 11, 1917, 18.

insecurity and exclusion for many other people, above all people with physical conditions we would today consider disabilities.

Across these events we see in miniature some of the central concerns animating this dissertation: the ongoing damage to people in workplaces, the representation of that damage as an issue of income security, and employers reacting to legal change by refusing to hire people they had previously found acceptable. Across these occurrences, this dissertation traces both continuity and change. The continuity: commodification of working class people. The change: this commodification became practiced in a new and more exclusionary way. Furthermore, the commodification of working class people increasingly occurred within terms and concepts that arose in the insurance industry, as part of what this dissertation refers to as the logic of risk.

More specifically, a chain of institutional actions and reactions resulted in new forms of employment discrimination and changed American injury culture. Courts, policymakers, businesses, and industrial physicians all dealt with the problem of employee injury. Legal responses to injuries in workplaces created problems to which policymakers reacted, creating problems to which businesses responded, creating problems to which physicians responded. Over the course of these changes, people in positions of institutional authority came increasingly to talk and think in terms and concepts derived from the insurance industry, terms and ideas like risk and impairment. American institutions administered access to employment in new ways, increasingly treated injuries in an apolitical and amoral fashion, discussed injuries in newly

dispassionate vocabularies, and reified injury into an unavoidable fact of social life. In dominant discourses injury became both taken for granted and something about which there was relatively little to say. This amounted to resignation to the idea that employment must maim and kill some people and obfuscation of those injuries and their human meaning.

Law

Let us follow “the owner of money and the owner of labour-power” out of the “noisy sphere” of the market,” wrote Karl Marx at a key juncture in *Capital*, and proceed to “the hidden abode of production on whose threshold there hangs the notice ‘No admittance except on business.’” Upon leaving the labor market, “the money-owner now strides out in front as a capitalist; the possessor of labour-power follows as his worker.” The employee “is timid and holds back, like someone who has brought his own hide to market and now has nothing else to expect but - a tanning.” This dissertation scrutinizes the point of contact between production and market, the place where Marx’s capitalist hung the sign “No admittance except on business.” This notice expressed the governing power of employers in multiple ways. Legal change transformed the ways employers commodified people and created newly impersonal and market-based ways of talking about ‘tanning,’ the injuries endured by many wage-earners. As a result, Marx’s notice notice and the governing power behind it changed as well.

The conditions under which buyers and sellers encounter one another in markets are created, maintained, and remade by law. This includes the buyers and sellers of labor power. Furthermore, law sets the terms according to which capitalists can use labor power after its purchase. Law is key to “the allocation of directive authority over the deployment of labor power in the employment relationship,” in Christopher Tomlins’s words.⁸ Law constitutes the authority of employers to govern employees. With injury law reform, changes in the legal regulation of the “hidden abode of production” shaped who could and could not gain admittance on business.

This dissertation’s approach to law builds on the work of legal historians including Barbara Welke, Margot Canaday, Amy Dru Stanley, and Susan Schweik, who analyze law’s role in creating categories of social inclusion and exclusion.⁹ As Eileen Boris has put it, “law creates categories and identities through which groups and individuals become known and know themselves.”¹⁰ These scholars write legal history in a way that bridges intellectual, cultural, and social history – simultaneously a history of

⁸ Christopher Tomlins, “Subordination, Authority, Law: Subjects in Labor History,” *International Labor and Working-Class History*, no. 47 (Spring, 1995): 56-90, 68. See also Christopher Tomlins, “The State, the Unions, and the Critical Synthesis in Labor Law History: A 25-Year Retrospect,” *Labor History* vol. 54 no. 2 (2013): 208-221.

⁹ Barbara Young Welke, *Law and the Borders of Belonging in the Long Nineteenth Century United States* (Cambridge: Cambridge University Press, 2010); Margot Canaday, *The Straight State: Sexuality and Citizenship in Twentieth-Century America* (Princeton: Princeton University Press, 2009); Amy Dru Stanley, *From Bondage to Contract; The Straight State: Sexuality and Citizenship in Twentieth-Century America* (Princeton: Princeton University Press, 2009); Susan Schweik, *The Ugly Laws: Disability in Public*, (New York: NYU Press, 2009).

¹⁰ Eileen Boris, “Labor’s Welfare State: Defining Workers, Constructing Citizens,” in *The Cambridge History of Law in America, Volume III: The Twentieth Century and After*, ed. Michael Grossberg and Christopher Tomlins (Cambridge: Cambridge University Press, 2008), 321. To quote Boris again, “[r]ather than a self-contained system, law is subject to social, ideological, gendered, and class assumptions. It is a product of its time,” 321.

cultural categories and of institutional power.¹¹ This could be called a history of the intellectual life of governance.

Governments “puzzle before they power,” which is to say, ruling over other people involves collective thought processes.¹² The ‘puzzling’ that governments do certainly draws from broader cultural contexts and intellectual history. At the same time, governments are cultural actors themselves: the way that states ‘puzzle’ can shape the cultural categories through which people outside of government think. Law is a particularly important component of how states ‘puzzle’ and a vehicle for transmitting ideas from institutions of governance into culture more broadly. Law is thus an especially important social vocabulary that helps create the social circumstances that people live in, as well as the categories through which people understand and seek to shape those circumstances.

This dissertation is rooted in particular in the history of employment law, as distinct from the study of labor law. The difference between labor law and employment law can be understood as simply a matter of administrative jurisdiction, at least in the United States after the 1930s. Labor law is the purview of the federal National Labor

¹¹ Robert Gordon has written that J. Willard Hurst and scholars writing in the Hurstian mode understand law as “a general label for several species of applied social intelligence” the point of which “is to increase men’s ability to achieve rational control over social change.” Robert W. Gordon, “J. Willard Hurst and the Common Law Tradition in American Legal Historiography,” 10 *Law & Society Review* 10, (Fall, 1975): 9-56, 45-46. Setting aside the issue of rational control, the emphasis on law as applied social intelligence means that legal history has an affinity with (or, more simply, means that legal history is a kind of) intellectual history. This can also be thought of as a kind of cultural history in Lawrence Levine’s sense, which he described as the study of “the minds of folk (...) the history of people thinking.” Michael F. Miller, “An Interview with Lawrence W. Levine,” *Folklore Forum* vol. 21 no. 1, (1998): 41-55, 44.

¹² Hugh Hecló, *Modern Social Politics in Britain and Sweden: From Income Relief to Income Maintenance* (New Haven: Yale University Press, 1974), 305, quoted in Margot Canaday, *The Straight State*, 5. I have found Canaday’s use of this idea particularly insightful.

Relations Board and similar bodies, which governs collective bargaining between employers and organizations of employees. Employment law is the purview of the federal Department of Labor and its state-level analogs, administering laws like the Fair Labor Standards Act and workmen's compensation.¹³

Employment law and labor law are also different kinds of state management of different facets of capitalist society, kinds of management with their own ways of thinking about and representing working class people.¹⁴ Labor law constitutes and regulates the official politics of class; employment law constitutes and regulates the ostensibly apolitical status of employment and thus helps normalize and reify class. Labor law is state regulation of conflicts between capital and labor as relatively self-conscious collective actors, setting the terms for legitimate and illegitimate forms of conflict between groups of employees and employers, and policing behavior accordingly. Employment law, on the other hand, sets the terms for legitimate employment practices

¹³ The decline of labor history, labor law, and employment law as fields of study, tied to the decline of the American labor movement, has slowed output in the history of labor law and employment law. Still, there exists a rich literature on both. Works on labor law history tend to center more narrowly on the history of collective bargaining. Works on the history of employment law vary more in their emphasis. For an overview of law and labor in U.S. history, see Eileen Boris, "Labor's Welfare State: Defining Workers, Constructing Citizens," in *The Cambridge History of Law in America, Volume III: The Twentieth Century and After*, ed. Michael Grossberg and Christopher Tomlins (Cambridge: Cambridge University Press, 2008). For an older but still relevant overview of labor and employment law history and their differences, see Christopher Tomlins, "How Who Rides Whom. Recent 'New' Histories of American Labour Law and What They May Signify," *Social History* 20, no. 1 (1995): 1-21. Boris's work shows the benefits to studying commonalities between labor and employment law in different periods, an approach that might open toward a broader synthesis of the role of law and the state in class relations. Tomlins has gestured toward such a synthesis, centering on the relationship between law, production, and reproduction. See Tomlins, "Subordination, Authority, Law: Subjects in Labor History," and more recently Tomlins, "The State, the Unions, and the Critical Synthesis in Labor Law History."

¹⁴ These different approaches to state management of class relationships do not have to map onto difference in institutional jurisdiction. Indeed, both forms of management overlapped in U.S. industrial relations institutions prior to the National Labor Relations Act. See Richard A. Greenwald, *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era* (New York: Philadelphia: Temple University Press, 2005).

outside of periods of collective conflict. In doing so, it establishes employment as normal and ostensibly apolitical and regulates the reproduction of the working class.

Reproduction, Commodification, and Insurance

In a capitalist society people need money to purchase goods and services required for an adequate quality of life, and for survival itself. For working class people, access to money is largely organized around wages. The need for money creates the need for employment. While it is easy to understand wages as tied to work and production, a wage is at least as much a reproductive as it is a productive institution.¹⁵ Capitalist control of the means of production, famously emphasized by the Marxist tradition, is simultaneously governance of working class reproduction. Employment and the need for employment shapes working class life well beyond waged workplaces. As David Montgomery has put it, “the encounter with wage labor (...) permeated social intercourse

¹⁵ Indeed, production and work have often been defined by their waged character, in a tautology such that only waged activity counts as work or production while unwaged activity, by virtue of being unwaged, is considered unproductive and not work at all. Jeanne Boydston’s *Home and Work* powerfully historicizes the relationship between work and wages in the United States. Male wage-earners in the 19th century began to claim that their waged work supported families, as part a claim for status and dignity as well as a way to prop up their demands for higher wages from employers. Rhetorical emphasis on the fact that wages matter to wage-earners’ households transformed into the notion that working-class households’ economic lives are reducible to waged income, thus obfuscating the importance of unwaged activities in households and in the economy as a whole. This obfuscation erased feminized labors and highlighted masculinized labors. Jeanne Boydston, *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic* (New York, 1990). As Michael Hardt and Antonio Negri have written, the definition of labor “always depends on the existing values of a given social and historical context” and so “is not given or fixed, but rather historically and socially determined.” Michael Hardt and Antonio Negri, *Labor of Dionysus: A Critique of the State-Form* (Minneapolis: University of Minnesota Press, 1994), 8. See also Mariarosa Dalla Costa and Selma James, *The Power of Women and the Subversion of the Community* (Bristol: Falling Wall Press, 1972); Silvia Federici, *Caliban and the Witch: Women, the Body and Primitive Accumulation* (New York: Autonomedia, 2004); and Leopoldina Fortunati, *The Arcane of Reproduction* (New York: Autonomedia, 1995).

outside the workplace as well as within in it.”¹⁶ Employers have the ability to dramatically restrict other people’s access to items they want and need, because of their control over hiring and firing. In the early twentieth century United States, changes in injury law led to changes in what employers did with their control over employees and in the commodification of working class people. Through workmen’s compensation, employment came to be conceptualized and organized along insurance lines, in keeping with what this dissertation calls the logic of risk.

Prior to workmen’s compensation, employers only sometimes paid the financial costs of employees’ injuries, and so those costs fell on employees, their families, and whatever support systems they had. Compensation laws shifted a share of the financial burden of injuries to employers. That new partial internalization of costs was organized through insurance methods, creating new requirements that employers carry employee injury insurance. As a result, people involved in hiring decisions began to talk increasingly like insurance companies, speaking in explicit terms about employees’ individual bodies as a source of risk and about their workforce as a risk pool. Employers also began to *act* more like insurers, regardless of the terms they used, in that they sought to select employees and applicants like life insurance companies selected among applicants for policies, seeking to reduce the total risk in their pool. Marx’s notice, “no admittance except on business,” became defined by the logic of risk.

¹⁶ David Montgomery, *Fall of the House of Labor: The Workplace, the State, and American Labor Activism, 1865-1925* (Cambridge: Cambridge University Press, 1987), 1.

In emphasizing risk this dissertation builds upon recent scholarship in the history of capitalism, focused on the cultural importance of the insurance industry and risk management.¹⁷ According to historian Jonathan Levy, the word risk first came into English as a technical term within maritime shipping. Merchants sold shares called risks in order to offset the cost of the loss of vessels and cargo at sea. In contemporary terms, they created risk pools to gain more financial security, spreading out the losses and the profits of maritime commerce. Over the course of the 19th century, risk spread from sea to land and from commerce to the rest of culture, becoming a term, concept, and practice through which people began to understand and organize their lives.¹⁸

This dissertation understands risk as danger or uncertainty defined in specifically financial terms for which a specifically financial form of security is provided. In this sense, something is a risk when it can be accounted for in money.¹⁹ Workmen's

¹⁷ See Arwen P. Mohun, *Risk: Negotiating Safety in American Society* (Baltimore: The Johns Hopkins University Press, 2013); Jonathan Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America* (Cambridge: Harvard University Press, 2012); Barbara Young Welke, "The Cowboy Suit Tragedy: Spreading Risk, Owning Hazard in the Modern American Consumer Economy," *Journal of American History* vol. 1, no. 1 (June, 2014): 97-121; Sharon Murphy, *Investing in Life: Insurance in Antebellum America*, (Baltimore: Johns Hopkins, 2010); Daniel Bouk, "The Science of Difference: Designing Tools for Discrimination in the American Life Insurance Industry, 1830-1930," (Ph.D. diss., Princeton University, 2009); Caley Horan, *Actuarial Age: Insurance and the Emergence of Neoliberalism in the United States* (Ph.D. diss., University of Minnesota, 2011). Francois Ewald, "Insurance and Risk," and Daniel Defert, "'Popular Life' and Insurance Technology," both in Graham Burchell, Colin Gordon, and Peter Miller, *The Foucault Effect: Studies in Governmentality* (London: Harvester Wheatsheaf, 1991); and Tom Baker and Jonathan Simon, *Embracing Risk: The Changing Culture of Insurance and Responsibility* (Chicago: University of Chicago Press, 2002).

¹⁸ Levy, *Freaks of Fortune*, 3.

¹⁹ Risk has multiple meanings. Arwen Mohun uses the term in the sense of danger and hazard in her recent book *Risk: Negotiating Safety in American Society*. Mohun traces a transformation in this kind of risk, from relatively unquantified risks managed through local and vernacular cultures, to an increasingly quantified, professionalized, and state-centered management of risk. That story sheds light on and overlaps with changes in workplace injury law, but this dissertation emphasizes risk as defined in a monetary and insurance-derived sense of the term in order to highlight the connection between this sense of risk and the commodification of people. For other works focusing on this sense of risk in U.S. culture, see Daniel Bouk,

compensation laws defined injury risk and provided security in this financial sense.

Compensation laws turned private employers into the guarantors of employee injury risk pools. The point was to provide social security, but in their managerial decisions business personnel were oriented primarily toward their firms' interests rather than the security of society. They thus managed risk in an actuarial fashion, seeking to reduce their individual share of workmen's compensation risk. This meant that there was a mismatch between the social security goal of compensation laws and the actuarial security mechanisms used to attain that goal.²⁰

When insurance is actuarially organized, some people will go uninsured, because actuarial insurance is predicated on selection among a population in order to decide who to insure and who not to insure. As such, while compensation laws caused more employees to become enrolled in injury insurance programs they also created new uninsured populations. Because compensation laws linked employment and membership

"The Science of Difference," Jonathan Levy, *Freaks of Fortune*, Caley Horan, "Actuarial Age," and Barbara Young Welke, "The Cowboy Suit Tragedy." Welke stresses the difference between risk and hazard in order to note what she calls the ownership of hazard, referring to "losses that are not shared," elements of people's experiences of injury which could not be monetized and against which insurance is no protection. Welke, "The Cowboy Suit Tragedy," 25.

²⁰ Compensation laws should not be viewed as social insurance, though some historians have characterized compensation laws that way. See for example Moss, *Socializing Security*, 23 and Roy Lubove, *The Struggle for Social Security, 1900-1935* (Cambridge: Harvard University Press, 1968), 45. This dissertation follows Economist Domenico Gagliardo in defining social insurance as involving state-provided insurance funds. Domenico Gagliardo, *American Social Insurance* (New York: Harper & Brothers, 1955), 19-20. The point is not that insurance must be state run but that it must be open to all rather than bounded according to profit concerns. Only seven U.S. states created compensation laws with state monopoly insurance funds. Ten other states created state funds that competed with private insurance; the remaining states required employers to privately secure their compensation risks. Compensation laws created "an employer mandate that a specific set of benefits be paid," as Fishback and Kantor put it, and mandated measures to secure payment of these benefits in a way that retained a much larger role for market-based insurance institutions than for state insurance. Fishback and Kantor, *Prelude to the Welfare State*, 104, 148-171.

in a risk pool, employers who refused a person's injury risk also refused to hire that person. As a result employment became actuarially distributed, creating populations judged too risky to hire. Employers began to practice the commodification of working class people in a new way.

It is worth pausing here to consider commodification as a category. As a social practice, commodification includes a diversity of activities that change over time, while maintaining common qualities specific to commodification. This dissertation highlights how injury law reform both changed and maintained commodification. Furthermore, this dissertation emphasizes specifically the ways different institutions and actors commodified people. This unjust treatment of people is too often obfuscated and naturalized.

To commodify something or someone is to affix a monetary value to the commodity. Doing so makes it comparable with other people or things "as magnitudes of the same denomination, qualitatively equal and quantitatively comparable," in Karl Marx's words.²¹ Commodification thus has an epistemological component; it is "an act which takes place entirely in the mind, and involves no physical transaction."²² As historian Stephanie Smallwood has put it, "commodification is fundamentally a representational act."²³ Commodification cannot occur without some relatively stable set

²¹ See Karl Marx, *Capital, Volume I: A Critique of Political Economy* (London: Penguin, 1976) 188.

²² Marx, *Capital, Volume I*, 190.

²³ Stephanie Smallwood, "Commodified Freedom: Interrogating the Limits of Anti-Slavery Ideology in the Early Republic," *Journal of the Early Republic*, no. 24 (Summer, 2004): 289-98; 292. See also William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill & Wang, 1983), 159-170, on commodification and representation.

of institutions and vocabularies through which people can do the mental work required for commodification. Compensation laws transported insurance-derived terms and concepts into employment, changing how employers thought and practiced the commodification of working class people.

Capitalism and Morally Thin Vocabularies

The study of economic life, particularly the history of capitalism, has recently returned to prominence among U.S. historians.²⁴ As part of this study, historians ought to discuss the politics of capitalism. The prevailing tendency in American law and culture treats waged labor as “a market relation, not a political one,” in Evelyn Nakano Glenn’s words, obscuring “the political aspects of the employment relation - control over the work itself, duties of care and obedience between workers and so on,” as legal historian Arthur McEvoy has put it.²⁵ Emphasizing the political character of employee injury is particularly important given the depoliticization of injury that this dissertation narrates.

²⁴ Jennifer Schuessler, “In History Departments, It’s Up with Capitalism,” *New York Times*, April 6, 2013, and Sven Beckert, “History of American Capitalism,” in Eric Foner and Lisa McGirr, *American History Now* (Philadelphia: Temple University Press, 2011).

²⁵ Evelyn Nakano Glenn, *Unequal Freedom: How Race and Gender Shaped American Citizenship and Labor* (Cambridge: Harvard University Press, 2002), 67. McEvoy, “Freedom of Contract, Labor, and the Administrative State,” in Harry N. Schreiber, ed., *The State and Freedom of Contract* (Stanford: Stanford University Press 1998), 203, quoted in Glenn, 67. Daniel Rodgers’s recent *Age of Fracture* has argued that in American intellectual life in the late 20th century there was a general decline in thinking about social life in terms of history, institutions, and power relations. Daniel Rodgers, *Age of Fracture* (Cambridge: Harvard University Press, 2011). Cultural historian William Sewell has made a similar argument though more narrowly focused on the history profession, noting that late twentieth and early twenty first century historians have generally paid less attention to structure and to the economy. William H. Sewell, Jr., “A Strange Career: The Historical Study of Economic Life,” *History and Theory*, no. 49 (December 2010): 146-166. Chad Pearson has recently argued that similar changes have occurred in the field of labor history tied to that field’s relative decline, which Pearson argues arises from many historians lack of attention to

Injury law reform helped transform the injury culture of American institutions, creating and spreading what this dissertation calls morally thin vocabularies. The term can be illustrated via the Robert Kennedy quote, “killing one man is murder. Killing millions is a statistic.” A murder is a morally rich concept; a statistic is not. Clifford Geertz’s writing on ‘thin’ and ‘thick’ description is instructive here.²⁶ Two accounts of the same incident illustrate the difference between thick and thin description: “one person’s eyelid twitched, then another person’s eyelid twitched” and “the young woman winked at her date, who winked back.” The second contains much more information about social and cultural context as well as the causal connection between the two events.

Across the arc of this dissertation from the end of the 19th century to the early 1930s morally thin vocabularies of injury crowded out morally thicker vocabularies in American institutions: from murder to statistics. Morally thick vocabularies may not be better than morally thin vocabularies, but the shift from one kind of vocabulary to another is an important cultural change. People in positions of institutional authority increasingly considered injured wage earners as dis-embedded from their social and interpersonal contexts. There is an element of moral thinning involved in the commodification of persons as such, because commodification must ignore differences and particularities,

class. Chad Pearson, “From the Labor Question to the Labour History Question,” *Labour/Le Travail*, no. 66 (Fall 2010): 195-230.

²⁶ Clifford Geertz, “Thick Description: Toward an Interpretive Theory of Culture,” in Geertz, *The Interpretation of Cultures* (New York: Basic Books, 1973), 3-32. In his work *The Slave Ship* Marcus Rediker criticizes what he calls the “violence of abstraction,” against which he poses a “human” approach to history. Marcus Rediker, *The Slave Ship: A Human History* (New York: Viking, 2007), 12-13. The point is both normative and methodological. From a normative perspective, some forms of abstraction are inhumane and historians ought to respond to them with criticism and opposition. Methodologically, an ethnographic or thick descriptive treatment of social practices can help undo or make visible the obfuscations created by abstraction.

setting aside whatever is unique or nonequivalent about them. When it comes to persons, those differences ignored tend to have a moral valence.²⁷ The early twentieth century moral thinning of injury, however, was due to the spread of a historically specific form of commodification of persons based in insurance as a worldview.

The dis-embedding or moral thinning of the vocabularies for treating employee injuries fits with dynamics identified by sociologists of law. Max Weber characterized legal forms of authority as defined by people's obedience not to individuals but to "enacted rules and regulations which specify to whom and to what rule people owe obedience. The person in authority, too, obeys a rule when giving an order, namely 'the law,' or 'rules and regulations'."²⁸ Weber saw this legal authority as especially characterizing bureaucracies, both in government and in private capitalist enterprises. For Weber, legal authority involves "'objective' discharge of business," by people acting "according to calculable rules and 'without regard for persons'." "Without regard for persons" is also the watchword of the 'market'.²⁹ Legal authority and market transaction, with their lack of 'regard for persons,' requires a degree of moral thinning.

Legal authority also actively produces moral thinning. As James Scott wrote, bureaucracies take "exceptionally complex, illegible, and local social practices" and

²⁷ In a recent article Barbara Welke explores the ways that aspects of human experiences of injury cannot be rendered as financial equivalents, and how the formatting of injury experience into money occludes those non-monetizable aspects of injury. See Barbara Young Welke, "The Cowboy Suit Tragedy."

²⁸ Richard Swedberg, ed., *Max Weber: Essays in Economic Sociology* (Princeton: Princeton University Press, 1999), 99. Weber's formulation has its limits in that both courts and insurance-based administrative systems are law and operating according to rules. The two systems have different institutional dynamics and courts should not be conflated with or reduced to bureaucracies.

²⁹ H.H. Gerth and C. Wright Mills, eds., *From Max Weber: Essays in Sociology* (Abingdon: Routledge, 1991), 215.

render them legible within “a standard grid” within which phenomena can be “centrally recorded and monitored.”³⁰ Bureaucracies simplify complex phenomena in order to systematize them in theory, in the service of remaking social activity in practice. Scott analyzes “state-initiated social engineering” but the point holds for any organization granted authority within some area of social life, as with the personnel who rewrote and enacted corporate hiring policy in response to injury law reform.³¹ Those projects had legally granted authority over a piece of social life. Taken together they added up to a form of decentralized social engineering via market institutions.³²

Understanding any particular process of abstraction and simplification requires attention to the goals and priorities to which that abstraction is put. As Scott writes, “abstractions and simplifications are disciplined by a small number of objectives.”³³ These objectives differ in state and in market institutions. In Scott’s words, “for capitalists, simplification must pay.”³⁴ This dissertation narrates how injury law reform transformed employers’ objectives, as manifested in employers’ efforts to avoid employing those populations judged to be particularly expensive to injure. Those efforts required new abstractions and simplifications, abstractions provided by medical

³⁰ James C. Scott, *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 2.

³¹ Scott, *Seeing like a State*, 4.

³² It is worth underscoring the authority of corporate managers and of employers more broadly, because that authority is often cloaked in a language of consent. As Weber put it, “[t]he fact that, formally speaking, people enter into the power relationship [of employment] voluntarily and are likewise ‘free’ to give notice does not affect the nature of private enterprise as a power structure since conditions of the labor market normally subject the employees to the code of the organization.” Weber, *Essays in Economic Sociology*, 100.

³³ Scott, *Seeing like a State*, 23.

³⁴ Scott, *Seeing like a State*, 8. While state and market institutions differ, they also exist in a dynamic interaction in capitalist society, shaping one another.

personnel, in the form of medical examinations aimed at identifying job applicants and employees with physical conditions that might result in expensive injuries.

With the spread of insurance as a worldview, professionals in law, policy, business, and industrial medicine began to conceptualize and practice the commodification of working class people through morally thin vocabularies that allowed less room for narratives of injury compared to the vocabularies of the court-based injury law system.³⁵ These vocabularies also precluded discussion of the human consequences of the new forms of employment discrimination. When it came to employee injury, different people had always had different answers to the question “is this just?” but with the moral thinning of injury that question itself became harder to pose.

³⁵ While this dissertation emphasizes the ways reformers, policymakers, and business personal helped create the moral thinning of the problem of injury, there were calls for a kind of moral thinning within the legal profession as well. In 1898 Oliver Wendell Holmes, Jr., published a speech titled “The Path of Law” where he warned against “confounding morality with law” and suggested perhaps it might be better “if every word of moral significance could be banished from the law altogether.” Oliver Wendell Holmes, Jr., “The Path of the Law,” in Steven J. Burton, ed., *The Path of the Law and its Influence: The Legacy of Oliver Wendell Holmes, Jr.* (Cambridge: Cambridge University Press, 2000), 333-351; 333, 339. Legal scholar Robert Gordon has pointed out that Holmes's speech is notable for treating lawyers as nothing more than the “neutral predictor of the output of courts,” a “policy analyst and utilitarian social engineer” in service of clients. Robert W. Gordon, “Law as Vocation: Holmes and the Lawyer’s Path, in Burton, *The Path of the Law and its Influence*, 7-32; 13. This expresses a kind of moral thinning of the law, one called for by Holmes as a legal professional. At the same time, Holmes still viewed the law as “the witness and external deposit of our moral life. Its history is the history of the moral development of the race. The practice of it, in spite of popular jests, tends to make good citizens and good men.” Holmes, “The Path of Law,” 334-335. Law recorded moral norms, and shaped individuals in such a way that they became better moral actors. This is an important difference from the incentive-based governance that occurred in the insurance worldview that reformers advocated. Holmes’s reflections on law and experience in *The Common Law* have a moral overtone as well, in that they bear on the moral character of the narrative modes of representation used in court. Holmes wrote that “[t]he life of the law has not been logic, it has been experience.” Legal rules, Holmes argued, derived above all from “[t]he felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow-men.” Oliver Wendell Holmes, Jr., *The Common Law* (Boston: Little, Brown, and Company, 1881), 1. Collective moral norms shaped the law and over time law became “a fund of experience.” Holmes, *The Common Law*, 124. This experience-fund embodying common sense was built in large part out of narratives told in court and existed in large part through rituals of narration.

Progressive Era Historiography and Significance

As a study of late nineteenth and early twentieth-century U.S. injury law reform, this dissertation is part of the historiography on the Progressive Era. This era, “more than any other, gave rise to modern America,” argues historian Robert Johnston.³⁶ As such, “[w]hen historians fight about Progressivism - and fight they do - they are not just arguing about events of a century ago. They are also struggling over the basic meanings of American democracy.”³⁷ Progressive Era historiography is also an argument about American liberalism and capitalism, historically and today. Labor historian Shelton Stromquist argues that liberalism obfuscates class and so is less an egalitarian social vision than a vision of relatively harmonious cooperation between superiors and subordinates, adding that “[t]he rhetorical power of that liberal tradition is once again in full flower” in the early 21st century.³⁸ This obfuscation of class also obscures both the

³⁶ Robert D. Johnston, “The Possibilities of Politics: Democracy in America, 1877 to 1917” in Eric Foner and Lisa McGirr, eds., *American History Now* (Philadelphia: Temple University Press, 2011), 96-124, 96. The work of many other historians supports Johnston’s point. See for example Gerald Berk, *Alternative Tracks: The Constitution of American Industrial Order* (Baltimore: Johns Hopkins University Press, 1994), arguing that the period between 1865 and 1917 created the foundations of the state and economic order that characterized modern America. Steven Piott writes that “[t]he period from the 1890s to 1920 was the time when modern America was really born.” Steven L. Piott, *Daily Life in the Progressive Era* (Oxford: Greenwood Press, 2011), xi. Sidney Milkis writes that the Progressive Era saw “changes that are still with us, indeed, that shape contemporary politics and government in the United States.” Sidney Milkis, “Introduction: Progressivism, Then and Now,” in Sidney Milkis and Jerome Mileur, *Progressivism and the New Democracy* (Amherst: University of Massachusetts Press, 1999), 1-39, 6.

³⁷ Robert D. Johnston, “Re-Democratizing the Progressive Era: The Politics of Progressive Era Political Historiography,” *The Journal of the Gilded Age and Progressive Era*, vol. 1. no.1 (January, 2002): 68-92, 68.

³⁸ Shelton Stromquist, “Response: Re-Class-Ifying the Progressive Movement,” *The Journal of the Gilded Age and Progressive Era* vol. 6, no. 4 (October, 2007): 467-471, 469. See also Shelton Stromquist, *Reinventing 'The People': The Progressive Movement, the Class Problem, and the Origins of Modern Liberalism* (Urbana: University of Illinois Press, 2006); Michael McGerr, *A Fierce Discontent: The Rise and Fall of the Progressive Movement in America 1870-1920* (New York: Free Press, 2003),

fact of subordination and that subordination is a political matter subject to questions of justice and injustice.

This dissertation treats Progressive Era injury law reform as an innovation in the legal rules governing employers, which led to changes in the ways employers governed their employees. These reforms were part of a broader set of changes in the culture and institutions of American capitalism. The Progressive Era was far from the first such transformation in American governance. During the late eighteenth and early nineteenth-century United States, law rose to prominence among the institutions, vocabularies, and conceptual orders through which governance occurs. The prominence of law aided the rise of a market and liberal political economy.³⁹ That legal, cultural, policy, and economic world became one in which labor was understood as free and employment was understood as a contractual affair.⁴⁰ With the end of slavery and the further spread of waged labor, contract as a legal doctrine and as a worldview spread further. Contract and free labor were bound up closely with ideas of freedom and selfhood; to be truly free was to be a self-owning male, and to interact with others was to contract with them freely.⁴¹

xiii-xiv; Jackson Lears, *Rebirth of a Nation: The Making of Modern America, 1877-1920* (New York: Harpers, 2009); Linda Gordon, "If the Progressives Were Advising Us Today, Should We Listen?" *The Journal of the Gilded Age and Progressive Era* vol. 1, no. 2 (April, 2002): 109-121.

³⁹ In his *Law, Labor, and Ideology in the Early American Republic* Christopher Tomlins argues that early in U.S. history law competed for prominence in the order of governing institutions, competing with ideas and institutions of political economy and of police. Law, and particularly courts, won that competition, with the result that courts ranked highly among the institutions governing American capitalist society. *Law, Labor, and Ideology in the Early American Republic* (Cambridge: Cambridge University Press, 1993) xv, 19-34.

⁴⁰ Stanley, *From Bondage to Contract*, 1-97.

⁴¹ Stanley, *From Bondage to Contract*, ix-xiii; Witt, *The Accidental Republic*, 22-42; Welke, *Law and the Borders of Belonging*.

In the late nineteenth century, when this dissertation begins, U.S. culture and institutions of governance turned toward an aggregating impulse, with the rise of statistical knowledge and probabilistic understandings of predictability. This was the rise of insurance as a worldview, which gradually became more distinct from contract. This worldview informed legal and policy changes while in turn law helped spread insurance as a worldview.⁴² The re-organization of governance in keeping with an insurance worldview in the Progressive Era marks a significant change in the history of U.S. capitalism, and an important continuity. Progressive Era capitalism remained capitalism, a social system in which working class people and needed goods and services are commodified, but it became a differently organized capitalism.

People who took up an insurance worldview in pursuit of social reforms did so in response to the growing economic and social uncertainty of the late 19th century. This period was the era of “the emergence of corporate capitalism,” writes historian David Berman.⁴³ With that emergence, argues historian Jackson Lears, “daily life became more subject to the systematic demands of the modern corporation.”⁴⁴ That subjection generated both new uncertainty and new forms of security, for both working class people and for capitalists. Progressive reforms and corporate restructuring were intended to provide new social stability.⁴⁵ While Berman argues that “the attack on large corporations

⁴² Witt, *The Accidental Republic*, 126-151; Levy, *Freaks of Fortune*, 1-6, 191-230.

⁴³ David Berman, *Politics, Labor, and the War on Big Business: The Path of Reform in Arizona, 1890-1920* (Boulder: University Press of Colorado, 2012), xi.

⁴⁴ Jackson Lears, *Rebirth of a Nation*, 1.

⁴⁵ James Livingston has argued that from U.S. capitalists' perspectives, the late nineteenth century was less of a Gilded Age than an era of great turbulence and limited ability to exercise social control.

or “monopolies” was the distinguishing characteristic of the Progressive period,” Progressivism as anti-corporate is hard to square with corporations’ and business personnel’s own versions of Progressivism.⁴⁶ Financier and corporate executive George Perkins’ involvement in the Progressive Party is probably the most distilled version of this corporate progressivism, but Perkins was far from the only corporate progressive.⁴⁷ People with this perspective could support government intervention to discipline individual capitalists in service of the greater health of U.S. capitalism.

Treating the Progressive Era as a time of innovation in capitalist governance conflicts with assessments like that of Robert Johnston, who sees the Progressive Era as above all a time of democratic possibility and an especially important point of reference in the present.⁴⁸ “In our current neoliberal age,” writes Johnston, “where communal bonds continue to fray and ‘The People’ seem to be drifting further away from their destinies, we could do much worse than” to draw inspiration and positive lessons from the Progressive Era.⁴⁹ Geographer David Harvey has similarly argued that neoliberal “commodification of everything can all too easily run amok and produce social incoherence.”⁵⁰ Karl Polanyi argued that historically the extension of commodification can begin to undermine society in ways that give rise to attempts to push markets back

James Livingston, *Origins of the Federal Reserve System, 1890-1913* (Ithaca: Cornell University Press, 1986), 34-35.

⁴⁶ David Berman, *Reformers, Corporations, and the Electorate: An Analysis of Arizona’s Age of Reform* (Niwot: University Press of Colorado, 1992), 152.

⁴⁷ On Perkins, see Levy, *Freaks of Fortune*, 264-307. Another work challenging the idea of Progressivism as anti-corporate is Martin Sklar, *The Corporate Reconstruction of American Capitalism, 1890-1916*.

⁴⁸ Johnston, “The Possibilities of Politics,” 104.

⁴⁹ Johnston, “The Possibilities of Politics,” 117.

⁵⁰ David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005), 80.

out of some areas of social life, as part of what Polanyi called a “movement to resist the pernicious effects of a market-controlled economy.”⁵¹

Polanyi argued that across the 19th century “[s]ociety protected itself against the perils inherent in a self-regulating market system.”⁵² The Progressive Era was home to this kind of Polanyian counter-movement. By linking the Progressive Era to neoliberalism today, Johnston suggests the need for another such counter-movement in the present. The Progressive counter-movement to protect society from the over-extension of commodification was, however, a self-defense mechanism that perpetuated capital accumulation. The society protected from the peril of the market in the early 20th United States was specifically a capitalist society. Injury law reform, as one such defense measure, presumed and preserved the continuing commodification of people. Basing a contemporary response to neoliberalism on the Progressive Era will likely do the same. As historian Rebecca Edwards argues, we should “look beyond the modest achievements” of the Progressive Era “and perhaps even beyond the New Deal.”⁵³ People in search of inspiration in the neoliberal present should not settle for the Progressive Era.

⁵¹ Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 1944), 80.

⁵² Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 1944), 80.

⁵³ Rebecca Edwards, “Politics, Social Movements, and the Periodization of U.S. History,” *The Journal of the Gilded Age and Progressive Era* vol. 8, no. 4 (October, 2009): 461-473, 473. Johnston criticizes historians who “abandon hope in the democratic legacy of, and possibilities within, Progressive Era politics,” calling these historians despairing cynics. Johnston, “Re-Democratizing the Progressive Era,” 70-71. Emphasis on injustice, however, does not imply a general cynicism and despair. Johnston quotes historian Glenda Gilmore on the need for historians to consciously seek “to reclaim ‘progressivism’” in service of the attempt to “build a new progressivism, this one a little less monstrous than some of those other hulks that still walk among us.” Johnston, “Re-Democratizing the Progressive Era,” 85-86. If anything, it is the narrowing of our social hope to merely “a little less monstrous” that expresses cynicism and despair.

While this dissertation does not treat the Progressive Era as a time of inspirational democratic potential and progress, neither does it treat the era as a time of decline. That emphasis on seeing neither progress nor decline forms part of the significance of this study's treatment of injury law reform and of the Progressive Era more broadly. This dissertation draws on scholarship in fields including labor history, Marxist theory, and the history of slavery in order to argue that Progressive Era reforms were an important change in forms of injustices inseparable from capitalist society. Historians of slavery are an especially important inspiration here in that these scholars do not generally engage with questions about how slavery might have been practiced better but instead emphasize that slavery was wrong.⁵⁴ While slavery varied in its particulars, these were variations on kinds of social practices and social institutions that should not have existed. Some slave masters were more abusive than others but the notion of a non-abusive slave master appears to a 21st century sensibility as a contradiction in terms. This dissertation treats waged work and employee injury similarly. (This is not to suggest that waged work and employee injuries were morally equivalent to slavery; that slavery is worse than waged labor is patently obvious.) Rather, this study draws on the moral robustness and moral culture of slavery scholarship, avoiding questions about how its historical subject matter might have been practiced more humanely in order to emphasize instead that injury and

⁵⁴ This orientation offers resources to the history of capitalism beyond the history of slavery; it bears mention slavery was also integral to the making of capitalism. See Nate Holdren, "Transatlantic Slave Trade," in Immanuel Ness, ed., *Encyclopedia of Global Human Migration* (New York: Wiley-Blackwell, 2013).

employment were themselves a kind of wrong. While there were variations that mattered, they were variations within a larger social pattern of injustice.

Sources and Methods

This study follows the effects of institutions on one another: law, policy, business, and medicine changed and each shaped the other. As such, the dissertation draws on a range of sources, including trial records, published legal decisions and treatises, and records and publications from government commissions, businesses, trade associations, industrial physicians and their associations, and unions. In terms of methods, this dissertation uses writing by social theorists like Karl Marx and Michel Foucault to help explicate archival research findings.⁵⁵ The dissertation also uses thick description to analyze how injury law reform created an important change in American injury culture. Thick description makes the moral thinning of injury visible, both narrating the loss of

⁵⁵ This use of theory surprised me and was not intended from the project's inception. I found late in the writing that theory helped me to understand my arguments in ways I had not foreseen. I write this with a sense that Marx's writing is somewhat out of fashion among U.S. historians in 2014, even though Marx's work remains intellectually fruitful, as demonstrated in the lively and important discussions about Marx in other fields as well as the work of numerous historians who have engaged with Marx. These historians include E.P. Thompson, *The Making of the English Working Class* (New York: Vintage, 1966); Eugene Genovese, *Roll, Jordan, Roll: The World The Slaves Made* (New York: Pantheon Books, 1974); Boydston, *Home and Work*; Tomlins, *Law, Labor, and Ideology in the Early American Republic*; and Johnson, *River of Dark Dreams*. Any contemporary renewal of Marxism (or better, marxisms, lowercase and plural) as an intellectual tradition in the 21st century would be well served by more historical and empirical work. While there are insightful theorists writing about and drawing on Marx, there are comparatively fewer scholars drawing on Marx to do scholarly work other than theory. That is not to reject theory but to note the over-representation of theory and the under-representation of other forms of inquiry among scholars who draw on Marx. The history of this over-representation is largely explained by Perry Anderson's *Considerations on Western Marxism* (New Left Review Books: London. 1976) and Daniel Rogers's *Age of Fracture*.

narrative in American institutions and describing the kinds of injury experiences occluded by the new injury culture.

Injury law reform touched off a transformation of social reproduction in American capitalism. Both this reform and the resulting transformation involved gender and disability; therefore the dissertation uses gender and disability as categories of analysis.⁵⁶ Gender analysis is most pronounced in the dissertation's analysis of women wage-earners' injury claims and the analysis of how gender appeared as an explicit concern within workmen's compensation laws. The point of those laws was to preserve the family, understood according to an ideal family with a gendered division of labor within which women's role was to perform unwaged labors in the home.

Injury law reform centered on the problems created by disabling accidents, but disability itself must be understood in historical terms. As scholars of disability history have argued, disability should be considered as a social and historical phenomenon, rather than exclusively medical, personal, and individual. That is, disability is a social relationship and a power relationship. People with disabilities, write Catherine Kudlick and Paul Longmore, should be considered as a "historically excluded minority."⁵⁷ This

⁵⁶ This dissertation's use of both gender and disability shows how these analytical categories can be integrated with other categories and approaches to history. These categories form part of how early 20th century American capitalism was organized: the legally constructed logic of risk was gendered and abled. Treating gender and disability as axes or principles according to which social reproduction occurs in capitalism is not to suggest that gender and disability are reducible to capitalism. Given the centrality of race to American history the relative absence of attention to race in this dissertation bears mention. This absence results largely from the exclusion of job classes like agricultural and domestic workers from compensation laws, which meant that compensation laws primarily affected white workers in the early 20th century.

⁵⁷ Catherine Kudlick and Paul Longmore, "Disability and the Transformation of Historians' Public Sphere," *Perspectives on History* vol. 44 no. 8 (November, 2006), Online, Internet,

means, in the words of Paul Longmore and Lauri Urmansky, that “the social marginalization and economic deprivation of many people with disabilities,” should be thought of as political and historically produced, rather than as natural or explained by physical condition.⁵⁸

Kim Nielsen has advocated for disability history as the history of the “definitions of “fit” and “unfit” bodies,” which means examining “how politics, culture, economics, and larger ideological notions of normality define who is and who is not disabled; or conversely, who is and who is not normal.”⁵⁹ This kind of history analyzes “the power to define bodies as disabled.”⁶⁰ This dissertation shows that employers had a key role in defining disability and in shaping the ramifications of being considered disabled.⁶¹ It was

<https://www.historians.org/publications-and-directories/perspectives-on-history/november-2006/disability-and-the-transformation-of-historians-public-sphere> Accessed January 15h, 2014

⁵⁸ Paul K. Longmore and Lauri Umansky, eds. *The New Disability History: American Perspectives* (New York and London: New York University Press, 2001), 12. In an analysis combining attention to disability, race, and gender, Barbara Welke has argued that U.S. law has assumed persons to be able-bodied white males. Law both reflects and creates disability as subordination and exclusion, and shapes how disability interacts with other kinds of subordination and exclusion. See Barbara Young Welke, *Law and the Borders of Belonging in the Long Nineteenth Century United States*. Douglas Baynton has argued that disability has long been used to justify hierarchy. Douglas Baynton, "Disability and the Justification of Inequality in American History," in Longmore and Umansky, *New Disability History* 33-57. Sarah Rose has argued that experiences of disability, including injury and occupational disease, have been central to labor and working class history. These experiences and disabled working class people have been largely ignored by labor historians, Rose argues, except for the use disabling injury and people with disabilities as symbols for narrative purposes. See Rose, "'Crippled' Hands." Rose's work and the work of John Williams-Searle has integrated disability into an analysis of class and working class experience in American history. See Rose, "No Right to be Idle" and Williams-Searle, "Courting Risk" and "Broken Brothers and Soldiers of Capital."

⁵⁹ Kim E. Nielsen, "Historical Thinking and Disability History," *Disability Studies Quarterly* vol. 28, no.3 (Summer, 2008), Online, Internet, <http://dsq-sds.org/article/view/107/107> accessed January 15th, 2014; Kim E. Nielsen, *The Radical Lives of Helen Keller* (New York: New York University Press, 2004), 3.

⁶⁰ Kim E. Nielsen, *A Disability History of the United States* (Boston: Beacon Press, 2012), 182.

⁶¹ Rosemary Garland Thomson argues that “[h]istorically, disabled people have for the most part been segregated either as individuals or in groups (...) enclosed, excluded, and regulation. (...) Perhaps the most enduring form of segregation has been economic.” Rosemarie Garland Thomson, *Extraordinary Bodies: Figuring Physical Disability in American Culture and Literature* (New York: Columbia University Press,

not disabled people's bodies that made disabled: employers disabled people, at least with regard to the prospects for finding employment.

In terms of this study's methods, two other categories of historical scholarship warrant discussion here: agency and contingency. These two concepts are central to much contemporary scholarship to such a degree that it bears some explanation how these concepts figure in this dissertation. A passage in John Steinbeck's *The Grapes of Wrath* illustrates the understanding of agency that informs this dissertation. A farmer facing eviction after foreclosure confronts the tractor driver knocking down foreclosed. Steinbeck narrated his farmer and tractor driver as facing a set of actors spread across multiple institutions who were themselves constrained by other social actors.

When the farmer threatened to shoot him, the tractor driver responded, "It's not me. There's nothing I can do. I'll lose my job if I don't do it." Seeking an individual agent to blame, the farmer asked, "Who gave you orders? I'll go after him. He's the one to kill."

"You're wrong," replied the driver. "He got his orders from the bank. The bank told him, 'Clear those people out or it's your job.' (...) Maybe there's nobody to shoot. Maybe the thing isn't men at all."⁶²

1997), 35. The point is not that disability is above all economic, but rather that economic marginalization is one frequent and important facet of disability.

⁶² John Steinbeck, *The Grapes of Wrath* (New York: Penguin, 2006), 38. Original publication, New York: Viking, 1939. For a similar situation involving a railroad conductor compelled to enforce Jim Crow laws, see Welke, *Recasting American Liberty*, 369-370. For a theoretical discussion of agency and its limits for historical scholarship, see Walter Johnson, "On Agency," *Journal of Social History* vol. 37, no. 1 (Autumn, 2003): 113-124.

The problems facing Steinbeck's farmer were not simply a matter of unsympathetic individuals. The problem was bigger and more diffuse.

If a bank or a finance company owned the land, the owner man said, The Bank—or the Company—needs—wants—insists—must have—as though the Bank or the Company were a monster, with thought and feeling, which had ensnared them. (...) We're sorry. It's not us. It's the monster. The bank isn't like a man. (...) The bank is something else than men. It happens that every man in a bank hates what the bank does, and yet the bank does it. The bank is something more than men, I tell you. It's the monster. Men made it, but they can't control it.⁶³

As depicted here, the American economy and society had a kind of independent and impersonal movement in which numerous people took part, while experiencing their participation as compelled by collective social practices with no single directing center. Their actions were the result of institutional and structural pressures rather than individual character or agency. In American economic life in the early twentieth century people lived like dominoes. Some fell on others, who fell on others, who fell on others, acting on one another with serious consequences while perceiving these actions and relationships only dimly and as out of anyone's control. Living this way could shape the subjectivity - the moral character - of the people involved. To quote Steinbeck again:

Some of the owner men were kind because they hated what they had to do, and some of them were angry because they hated to be cruel, and some of them were cold because they had long ago found that one could not be an owner unless one were cold. And all of them were caught in something larger than themselves. Some of them hated the mathematics that drove them, and some were afraid, and some worshipped the mathematics because it provided a refuge from thought and from feeling.⁶⁴

⁶³ Steinbeck, *The Grapes of Wrath*, 36.

⁶⁴ This passage can be read as depicting the effects of morally thing vocabularies on people in low-level positions of institutional power. The study of such people can be considered what historian Steven Zdatny has called "history from the middle up." Steven Zdatny, *The Politics of Survival: Artisans in Twentieth-Century France* (Oxford: Oxford University Press, 1990), ix. As the spatial term

While some people had more reach than others, everyone's scope of conscious action and immediate influence was limited.

An image from Frank Norris's 1902 short story "A Deal in Wheat" illustrates the sense of contingency and necessity in this dissertation. Norris described people living through "a crisis that at any moment might culminate in tragedy." Financial ruin led one of these people to a bleak epiphany: "Dimly he began to see the significance of things. Caught once in the cogs and wheels of a great and terrible engine, he had seen – none better – its workings." The ensemble of institutions described in this dissertation formed another "great and terrible engine." It was historically contingent that this engine existed but once that engine existed, it was not contingent that many people were ground up in its "cogs and wheels."⁶⁵

Marcus Rediker's *The Slave Ship* offers an example of the power of structure and necessity for historical analysis and for calling attention to social injustice. Rediker powerfully narrates the human costs and consequences of the transatlantic slave trade, costs that were in an important sense not contingent. Slavery could only be a violent, dehumanizing practice. Contingency in Rediker's story lies upstream from the slave ship,

'middle' indicates, these actors exist between the operations of top-down and bottom-up operations of power. Karen Ho's *Liquidated* is an example how this kind of study can illuminate economic life. Study of these actors demonstrates that economic life "is infused with the organizational strategies" of the social actors who simultaneously make and "are subject to the market." Karen Ho, *Liquidated: An Ethnography of Wall Street* (Durham: Duke University Press, 2009), 6.

⁶⁵ Both John Fabian Witt and Risa Goluboff have written works showing the power of the concept of contingency for the study of law. John Fabian Witt *The Accidental Republic: Crippled Workingmen, Destitute Widows, and the Remaking of American Law* (Cambridge, MA: Harvard University Press, 2004); Risa Goluboff, *The Lost Promise of Civil Rights* (Cambridge, MA: Harvard University Press, 2007).

so to speak. Slavery was itself contingent, but once slavery existed, violence was necessary, not contingent; the consequences flowed from the institution. In an analogous way, this dissertation emphasizes a kind of necessity from social structures that were themselves contingent. While there were roads not taken, such alternative courses would have required significant institutional changes, which in turn would have required significant challenges to existing class relationships and power differentials. Such changes did not occur. This dissertation begins downstream from those contingencies, emphasizing not alternative possibilities but the course that history actually took, and that course's costs.⁶⁶ Thus this dissertation narrates historical transformations as having a kind of inexorability. Once assembled, the great and terrible engine ground on, with individuals being less the agents than the regretful instruments of that engine.⁶⁷

⁶⁶ In a series of recent articles, Christopher Tomlins has argued that emphasis on contingency has characterized legal history since the reception of Critical Legal Studies, typified by Robert Gordon's "Critical Legal Histories" in 1984. Robert Gordon, "Critical Legal Histories," *Stanford Law Review* vol. 36 no. 57 (1984) 57-125. Tomlins argues that Critical Legal Studies and legal history based on critical legal studies has over-emphasized the indeterminacy of the relationship between law and society to the degree that it has treated social relationships themselves as indeterminate. Tomlins argues against this that historians should move beyond emphasis on contingency. See Christopher Tomlins, "What is Left of the Law and Society Paradigm After Critique? Revisiting Gordon's 'Critical Legal Histories,'" *Law and Social Inquiry* vol. 37, no. 1 (Winter, 2012), 155-66; Christopher Tomlins, "After Critical Legal History: Scope, Scale, Structure," *Annual Review of Law and Social Science* vol. 8 no.1 (December, 2012): 31-68; Christopher Tomlins, "The State, the Unions, and the Critical Synthesis in Labor Law History: A 25-Year Retrospect," *Labor History* vol. 54 no. 2 (2013): 208-221.

⁶⁷ In addition, both Rediker's *The Slave Ship* and this dissertation are in a sense a synecdoche. Synecdoche is the rhetorical trope in which a part stands in for a whole, as when employees are called hired hands, employees' hands stand in for their selves, or when a whole stands in for a part. When history is written as synecdoche the historical particulars matter, but there are different kinds of particularity. Some are exceptional and others are exemplary. Exceptional particularities do not form a larger historical pattern; exemplary particularities do and can represent the patterns they exemplify. For Rediker, slave ships were sites of terrible brutality without which the system of slavery could not exist, and they stand as symbols of slavery as a whole. This dissertation treats injuries and the commodification of waged workers in injury law and business practice as similarly exemplary. As Christopher Tomlins writes, in history there are many "repetitious regularities," regularities that both should be explained and which can be used to symbolize the social structures

All of that said, there were important contingencies relevant to the story this dissertation tells. Capitalism itself is a contingent social system, and there were smaller or downstream contingencies in specific institutional forms as well. Two related developments in American employment law made possible many of the changes described in this dissertation: the doctrine of at-will employment and the absence of a right to employment.

At-Will Employment and a Right to Employment

The doctrine of at-will employment means that employees cannot be legally forbidden to quit their jobs and that employers can only rarely be legally forbidden to fire employees. “An at-will employment relationship,” explain labor law scholars Katherine Stone and Harry William Arthurs, “is one that can be terminated by either party at any time for any reason.” At-will employees “have no enforceable claim to ongoing employment.”⁶⁸ At-will employment is unique to the United States. Other industrialized countries “require either a notice before discharge, severance pay, just cause, or some

that produce them. Christopher Tomlins, “After Critical Legal History: Scope, Scale, Structure,” 36. One kind of these regularities are the injustices that predictably arise in capitalist society. Treated this way, specific instances of injustice can be treated simultaneously as instances of particularity worthy of attention for their own sake and as a synecdoche for capitalist society.

⁶⁸ Katherine V.W. Stone and Harry Arthurs, *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, (New York: Russell Sage Foundation, 2013), 368. There are important exceptions to at-will employment, though they were not in place in the early twentieth century. Generally speaking, the rule of termination at any time holds except when a collective bargaining agreement is in force which limits employers’ ability to terminate, or when an employer fires someone for membership in a legally protected group, i.e., when the employer engages in a kind of discrimination which is illegal in the jurisdiction where the employer operates. See Charles J. Muhl, “The Employment-At-Will Doctrine: Three Major Exceptions,” *Monthly Labor Review* 124 (January, 2001): 3-11.

combination.”⁶⁹ At-will employment forms the institutional particulars of how employer control over the hiring and firing of waged workers has been organized in the United States from the late 19th century to the present.⁷⁰ As such, at-will employment has been an important shaping force in American labor relations and American capitalism.⁷¹

Horace Wood provided the first explicit formulation of the doctrine of at-will employment in his 1877 *Treatise on the Law of Master and Servant*. Wood noted an older English legal presumption that in the absence of an explicit contract, employment would last for a year, and argued that this presumption did not hold in the United States.⁷² The doctrine quickly became a matter of law. As the Tennessee Supreme Court formulated

⁶⁹ Kenneth M. Casebeer, “At-Will Employment,” in Eric Arnesen, ed., *Encyclopedia of United States Labor and Working-class History* (New York: Routledge, 2007), 136. As Casebeer notes, the reasons for the rise of the doctrine of at-will employment is the subject of scholarly disagreement.

⁷⁰ Not all employment in the U.S. has been at-will employment, in that some employees have been unionized while others have worked in legally coerced circumstances. It is easy to think that legally coerced or bound labor ended in the United States with the Civil War, but it did not. On the continuation of forced labor in U.S. history, and often legally sanctioned forced labor, see Welke, *Law and the Borders of Belonging*, 31-32; Douglas Blackmon, *Slavery by Another Name: The Re-Enslavement of Black Americans from the Civil War to World War II* (New York: Doubleday, 2008); David M. Oshinsky, *Worse than Slavery: Parchman Farm and the Ordeal of Jim Crow Justice* (New York: Free Press, 1996); Rebecca McLennan, *The Crisis of Imprisonment: Protest, Politics, and the Making of the American Penal State, 1776 – 1941* (Cambridge: Cambridge University Press, 2008); Goluboff, *The Lost Promise of Civil Rights*. On the continuation of prison labor today, see Asata P. Blair, *Prison Labor in the United States: An Economic Analysis* (New York: Routledge, 2008).

⁷¹ At-will employment provides a good counter-example to the idea that law follows after the economy. For criticisms of that idea, see Robert Gordon, “Critical Legal Histories,” *Stanford Law Review* vol. 36 no. 57 (1984) 57-125, and Christopher Tomlins, *Law, Labor, and Ideology*, 304. See also the symposium on “Critical Legal Histories” in *Law & Social Inquiry* vol. 37, no. 1 (Winter, 2012). As Tomlins puts it, law is a “modality of rule,” a form of governance that shapes the meaning of and set the rules for other social behaviors broadly, in economic life and beyond. Tomlins, *Law, Labor, and Ideology*, 19-34. Rather than law being determined by the economy, law constitutes economic life not least because concepts and practices of property, money, employment are simultaneously economic and legal. This is especially so if ‘economic life’ is understood expansively so as to include class relationships, employers’ directive authority, and the commodification of people. See also Michael Heinrich, *Introduction to the Three Volumes of Karl Marx’s Capital*, translated by Alexander Locascio (New York: Monthly Review Press, 2012), 199-218.

⁷² H.G. Wood, *A Treatise on the Law of Master and Servant covering the Relations, Duties and Liability of Employers and Employees* (Albany: John D. Parsons, Jr., 1877) 271-272. See Casebeer, “At-Will Employment,”

the idea in 1884, employers could fire employees “for good cause, for no cause, or even for cause morally wrong, without thereby being guilty of a legal wrong.”⁷³ At-will employment amounted to an employer right to fire at will. This meant that employers had the legal freedom to discriminate as they saw fit based on the new allocation of costs brought about by injury law reform in the 1910s.

A second and closely related condition that made possible employers’ response to injury law reform was the absence of a right to employment. Though called for by advocates, this right was never seriously instantiated in law in the United States. Walter Rauschenbusch noted that many working people and the labor movement “regard[ed] a job as a property right” and argued that this should be given the force of law by being made into a right officially.⁷⁴ In Rauschenbusch’s view “[t]he industrial worker needs some property right in the industrial system in which he works (...) He must hold some fractional rights like that of a share-holder (...) The simplest and most effective form which such property right could take would be the right of a man to a job. (...) He needs a secure tenure of employment, to last as long as he is efficient and honest, so that he cannot be discharged arbitrarily.”⁷⁵ Without such a right, “the right to life and liberty remains a fragmentary right so far as the workingman is concerned. The business class

⁷³ *Payne v. The Western & Atlantic Railroad, Co.*, 81 Tenn. 507, 1884. A number of federal and state laws as well as municipal ordinances were passed in the twentieth century which made particular reasons for firing illegal, such as firing someone due to their race or due to union activity. These limitations on employers’ right to fire vary greatly, and their actual efficacy depends on whether or not there is enforcement. Even when real enforcement does exist such that there are actual curtailments of employers’ discretionary latitude, that does not change the basic power that employers have to control hiring and firing.

⁷⁴ Rauschenbusch, *Christianizing the Social Order*, 348.

⁷⁵ Walter Rauschenbusch, *Christianizing the Social Order* (New York: The Macmillan Company, 1914), 347.

have fought for and secured for themselves the “freedom of industry,” which meant the right to have free access to nature and to produce wealth by manufacture and commerce. That right is valueless to the workingman under modern conditions.”⁷⁶

Economist and future Wisconsin Industrial Commissioner John R. Commons argued similarly in his 1893 *The Distribution of Wealth*.⁷⁷ Commons believed that the rising productive capacity of American industry made the right to employment plausibly realizable.⁷⁸ He added that every worker could be guaranteed “a share of the total income in excess of his minimum of subsistence.”⁷⁹ Commons’s proposal would mean that rising wealth was to be shared across society as a matter of policy. Furthermore, if people were to be paid something regardless of employment, there would be incentives to find work for those people to do. In his 1894 *Socialism*, economist Richard Ely similarly argued that “it is practicable to guarantee to every one a minimum subsistence,” adding that it was “much better that subsistence should be furnished in return for work rather than without work. There is always plenty of work to be done.” Ely added as well that the right to employment must soon have legal force, given increasing assertion of this right by unions.⁸⁰ Ultimately, the right to employment was not successfully instantiated in

⁷⁶ Rauschenbusch, *Christianizing the Social Order*, 348.

⁷⁷ John R. Commons, *The Distribution of Wealth* (New York: The Macmillan Company, 1893), 79-85.

⁷⁸ Commons, *The Distribution of Wealth*, 83.

⁷⁹ Commons, *The Distribution of Wealth*, 84.

⁸⁰ Richard Ely, *Socialism: An Examination of its Nature, its Strength, and its Weakness, with Suggestions for Social Reform* (New York: Thomas Y. Crowell & Company, 1894), 332. Ely’s reference to union assertion of a right not yet instantiated in law is important. Part of the work done by employment law and by labor law is to set the terms through which employees and unions can make claims and the processes through which claims asserted can or can not be made into law.

law.⁸¹ Employers' legal right to fire at will and to refuse hiring played fundamental roles in facilitating employers' discriminatory responses to injury law reform. More expansively, at-will employment particularly helped shape the effects of the new social logic of risk which injury law reform introduced into U.S. employers' hiring decisions.

Chapter Summary

The title of Illinois Senator Glackin's 1906 editorial spoke volumes: "Life and Limb Too Cheap."⁸² Glackin's proposed solution to the problem of employee injury was, essentially, to properly price life and limb through a system of insurance. Doing so would fix problems of lost income resulting from employee injuries. Chapter one analyzes calls for reform like Glackin's. Injury law reformers criticized the court-based system of injury compensation at the turn of the twentieth century. The chapter juxtaposes these reformer's criticisms with the actual performance of the court-based system of injury law, in order to argue that this system changed over time in ways that reformers did not recognize. The chapter frames the difference between courts and reformers as one between two different sorts of liberalism, a difference over how best to commodify working class people in the case of employee injury and over what institutions were best suited for governing this commodification. The chapter characterizes the victory of insurance-based approaches to the injury problem as an example what philosopher

⁸¹ The idea of a right to employment remained largely a hope on the part of unions and theorists, but the idea was considered in at least attenuated form in court proceedings over blacklisting of pro-union employees. See Rupert Sargent Holland, "The Rights of an Employee Against Employers' Blacklists," *The American Law Register*, vol. 51 no. 12 (December, 1903): 803-809.

⁸² *Chicago Daily News*, December 10, 1906, 2.

Michel Foucault called biopolitics, and as facilitating the spread of morally thin vocabularies of injury.

Edward Glackin and others worried especially about what happened to working class families when their income was disrupted. Policymakers' treated these families as labor suppliers, and wrote that understanding into workmen's compensation legislation, as chapter two argues. Families needed money to produce labor power and so compensation laws temporarily supplemented family incomes when male wage earners suffered injuries that disrupted their earning ability. This understanding of families and their roles was gendered, assuming that men's proper role was to earn incomes while women's proper role was to perform unwaged labor in the home. The chapter focuses on debates among policymakers and on an industrial disaster in Illinois that informed the creation of compensation laws in Illinois and nationally. This juxtaposition shows both how policymakers and disaster relief workers commodified people, underscoring elements of the human experience of injury that do not fit within the new insurance-based system of injury law.

Compensation laws arose simultaneously with the rise of the new discipline of industrial medicine, the subject of chapter three. Industrial medicine began as a profession focused on managing employee health. As later chapters show, compensation laws would remake industrial medicine, and industrial medicine would play an important role in the effects of compensation laws. This chapter shows another important

contingency. What industrial medicine became is not how the field began. The discipline differed prior to compensation laws.

Chapter four narrates how the legislative re-allocation of compensation risks under workmen's compensation shaped businesses' responses to injury law reform, with important social consequences. Workmen's compensation statutes took the variable and unpredictable costs of employees' injuries and transferred them to employers as a cost of doing business. This cost shifting effectively exposed employers to new financial risks. Compensation statutes allowed employers to insure these new risks in several ways. Chapter four argues turns to the discriminatory consequences of injury law reform, arguing that these consequences were intensified by particular methods of insuring employee injury costs. Compensation laws allowed large firms to carry their own risks, so-called "self-insurance," while requiring smaller firms to enroll in an insurance plan. All compensation laws created incentives for discrimination, but these incentives were especially intense for companies that self-insured, due to the combination of self-insurance as defined in legislation and the actuarial, administrative, and economic structures of large, fixed-capital intensive manufacturers.

Lawsuits brought by individuals with disabilities further intensified these incentives, making people with disabilities into a population subjected to greater discrimination – the topic of chapter five. At the opening of the 20th century, men and women with physical impairments, conditions that we would today consider disabilities, found employment across the U.S. economy. These individuals faced discrimination in

pay rates, according to the widely held and legally supported notion that physically impaired employees were less productive and so worth less, but nonetheless people with physical impairments could be employed. As with gender analysis, disability scholarship informs this dissertation as a whole but is especially present in this.

Workmen's compensation statutes assumed that workers were able-bodied despite the widespread employment of people with physical impairments, thus making injuries to physically impaired people legally ambiguous. For example, statutes often defined blindness as the loss of two eyes, and as a permanent total disability, while defining the loss of one eye as a permanent partial disability, a lower category of compensation. These categories made it unclear how much compensation should be awarded when a one-eyed man lost his only eye. Courts in the late 1910s and 1920s heard numerous lawsuits over precisely this question.

Compensation statutes began a shift from common law to administrative proceedings that were supposed to resolve injury claims more quickly than courts, but physically impaired people were not initially included in this shift. Over time, in courts across the country the prevailing legal standard became that injured workers would be compensated for their total post-injury condition. That standard raised employers' costs for injuries to disabled employees. Employers swiftly reacted by refusing to hire people with disabilities, instead hiring specialists in the new discipline of industrial medicine in order to systematically screen out applicants and employees believed to be more expensive to injure. Chapter six discusses the interaction of industrial medicine and

employment discrimination under workmen's compensation, arguing that industrial physicians played a key role in formulating and implementing businesses' discriminatory practices. Playing this role expanded the field of industrial medicine and also remade the field into a profession of corporate risk management via medicalized employment discrimination.

By 1925, forty-two U.S. states had workmen's compensation legislation, and major U.S. companies such as Pullman, the Crane Corporation, Western Electric, and International Harvester had enacted medical examinations for job applicants and employees, in order to screen out people judged physically defective. Workmen's compensation statutes thus changed the structure of employment discrimination against people with disabilities from one of subordinated inclusion – jobs, but lower pay – to one of exclusion from work altogether.

During the late 1910s the professionals who created and carried out corporate programs of medical examinations organized themselves into their own associations. Industrial physicians found themselves caught in the tension between different aims or logics operating in injury law: a welfare logic centered on providing income to workers in the event of injury, a medical care logic aimed at meeting the medical needs of the injured, and an actuarial logic centered on reducing employers' costs and liabilities and minimizing unpredictability.

Compensation laws, intended to secure American labor markets by shoring up the incomes of male breadwinners, had become a reason for businesses to code people with

disabilities as risks to be avoided. As a result, employers fired disabled people in large numbers and refused to hire disabled applicants. Through employers' medically mediated responses to a new policy, legal, and economic environment, physically impaired people became disabled in a new way, socially and economically. Hiring physically impaired employees became an unacceptable risk for employers while the new exclusion of the impaired from employment quickly became viewed by many as an acceptable loss.

Compensation laws were supposed to provide greater macro-level labor market stability through the mechanism of individual businesses, institutions that had as much or more interest in reducing their individual share of injury cost as they had in sharing total injury costs or reducing aggregate social insecurity. That way of allocating costs and providing security helped turn compensation laws into incentives for economic exclusion. To use Edward Glackin's words, compensation laws had fixed the problem of "Life and Limb" being "Too Cheap," and employers had decided that hiring some people was now too expensive, thus rendering those people's labor power worth less on the labor market. Chapter seven explores how workers and unions contested these changes through a variety of means. Business personnel justified their actions in morally thin vocabularies, treating these decisions as apolitical. Workers' resistance throws into relief the political nature of employers' decisions to discriminate.

The dissertation ends in the early 1930s, before the New Deal. By this time, employment discrimination in response to compensation laws was the norm in American businesses and industrial medicine had become a field defined by carrying out this

discrimination. The dissertation's conclusion discusses the ways in which the 1935 Social Security Act failed to address the needs of those excluded from work by employers' responses to compensation laws. The conclusion further reflects on morally thin vocabularies and on the politics of injury and (the lack of) injury narratives.

The concluding reflection on moral thinning draws on narrative vignettes which appear between the chapters of this dissertation. These vignettes play several roles over the course of the dissertation. They serve as a reminder of the persistent production of injury in the early twentieth century economy, a continuity that provides the backdrop to everything else in this dissertation. The vignettes also interrupt the dissertation's larger narrative flow. The dissertation describes the assembly of an institutional machinery that produced employment discrimination and allowed decreasing space for the human meaning of injury. As narrated across the dissertation's chapters, that assembly occurred with a sort of social inexorability, a kind of predictability, tied to the spread of insurance as a mechanism for providing social order and security. For the people harmed by these events, however, the result was not order or predictability but disorder and uncertainty. The vignettes between chapters represent that by disrupting the larger narrative and by the scenes of injury that they depict.⁸³ The vignettes also underscore both the spread of morally thin vocabularies and the human meanings of injury that did not fit within those vocabularies, by serving as a reminder of the human experiences of injury and the kinds

⁸³ For a thought-provoking work on a specific historical incident and on the importance of narrative, dramatization, and history, see Barbara Young Welke, "Owning Hazard: A Tragedy," *UC Irvine Law Review* vol. 1, no. 3 (September, 2011): 693-771.

of narrative representation of injury pushed out of institutions with the spread of morally thin vocabularies.

Nettie Blom. June 30th, 1900.

She pressed her palm on the wet linen tablecloth, holding the fabric flat as she inched it toward the spinning felt-covered rollers of the ironing machine. The machine took the edge of the tablecloth, pulling it; the fabric began to move on its own under Blom's hand. A moment later her hand was between the rollers. She screamed and tried to pull herself free but the machine pulled her forward, grinding the bones of her hand against the steam-heated iron roller. A co-worker rushed over, stomped on the foot-pedal turning off the machine, and threw the lever to open the machine. Three of Blom's co-workers at the laundry fainted when she pulled her hand free. The hand was black and blue to the wrist. Bone stuck through the skin on her first three fingers, and the flesh looked like boiled meat. Blom's injury would result in the surgical amputation of her index, middle, and ring finger.⁸⁴

⁸⁴ *Blom v. Yellowstone Park Association*, 86 Minn. 237 (1902).

Chapter One. Commodification and Governing Injury: From Courts to Reform in the Turn of the Twentieth Century United States

Throughout the 19th century, courts were the foremost public institutions governing employee injuries. In the early 20th century, a growing chorus of reformers attacked the court-based system of employee injury law, arguing that courts were incapable of adequately treating the problem of employee injury. Reformers believed that employee injuries required an alternative system of injury compensation based on insurance methods: workmen's compensation. This chapter argues that reformers and courts did not differ starkly as reformers sometimes suggested. Courts and reformers exemplified two different kinds of liberalism, an individualist and a social liberalism, which practiced different ways of treating working class people as commodities.

Injured employees faced great physical and emotional pain as well as new expenses due to their injuries: loss of income during their time spent convalescing, and potentially changed employment prospects after their immediate recovery, to the extent that they did recover. The families of wage earners killed on the job faced grave circumstances as well. Many injured individuals and their families believed that employers should assist them financially in these new and difficult circumstances, and they expressed this belief by bringing lawsuits against employers. Unfortunately for the injured and their families, for much of the 19th century, the odds were poor that these

kinds of plaintiffs would win their suits. Numerous early 20th century reformers, and since then numerous U.S. historians, have argued that injured workers rarely won their injury lawsuits.¹

Injury law reformers saw the court system as insulating employers from liability. In 1910, social investigator and attorney Crystal Eastman noted that a recent survey of New York Labor Department data on 902 accidents resulting in disability found that “only a small proportion of the workmen injured by accident of employment get substantial compensation.”² In her own survey of injury cases, Eastman found that fifty three percent of fatal workplace accidents went uncompensated.³ James Harrington Boyd of the Ohio Employers Liability Commission wrote in 1913 that “the common law does not presume to furnish any relief for something like from sixty to eighty per cent of all persons injured in the United States.”⁴ Journalist William Hard reported that out of a study of 241 workplace accidents, 194 went uncompensated.⁵

Plaintiffs in employee injury suits faced difficult legal obstacles, specifically a set of legal defenses that effectively blocked employees’ lawsuits the vast majority of the time. Three central doctrines comprised employers’ legal defenses in injury liability suits: the fellow servant rule, assumption of risk, and contributory negligence. The fellow

¹ Historian Paul Bellamy has argued that too many historians have taken reformers at their word and characterized courts in the same way. Paul Bellamy, “From court room to board room: Immigration, juries, corporations and the creation of an American proletariat: A history of workmen’s compensation, 1898-1915.” PhD diss., Case Western Reserve University, 1994, v-x.

² Crystal Eastman, *Work Accidents and the Law* (New York: Russell Sage Foundation, 1910), 271.

³ Eastman, *Work Accidents and the Law*, 121.

⁴ James Harrington Boyd, *Workmen’s Compensation and Industrial Insurance Under Modern Condition* (Indianapolis: The Bobbs-Merrill Company, 1913), 77.

⁵ William Hard, *Injured in the Course of Duty* (New York: The Ridgway Company, 1910), 66.

servant rule meant that if the accident was the fault of another employee, the employer was not liable. Assumption of risk meant that if an employee knowingly worked under risk of injury, then the employee consented to taking that risk; therefore, the employer was not liable should injury result. Contributory negligence meant that if the employee could be shown to have been partially at fault for the accident, then the employer was not liable.⁶

When the trio of employers' legal defenses operated, injured employees could only win lawsuits by proving that they bore no fault for their injury, did not know they were in danger, and that fault rested solely with their employers. Most of the time employees could not meet this standard, so many people's injuries went uncompensated. Many reformers argued that as a result injured employees bore the brunt of the financial cost of injury in addition to the cost in pain and in damage to their bodies. For much of the 19th century, employers' legal defenses walled off employees' injury costs from employers, rendering injury costs as what economists today would call negative externalities, "cost[s] of production for which a producer assumes no direct financial

⁶ Iowa Employers' Liability Commission, *Report of Employers' Liability Commission* (Des Moines: Emory H. English, State Printer, 1912) 13-18; John Fabian Witt, *The Accidental Republic: Crippled Workmen, Destitute Widows, and the Remaking of American Law* (Cambridge: Harvard University Press, 2004), 22-43; Lawrence M. Friedman, "Civil Wrongs: Personal Injury Law in the Late 19th Century," *American Bar Foundation Research Journal* Vol. 12, No. 2/3 (Spring - Summer, 1987), 351-378. Jonathan Levy's *Freaks of Fortune* interprets the creation of the fellow servant rule in light of the history of insurance in maritime shipping and the broader cultural and intellectual history of risk. Levy argues that the *Farwell* decision, which created the fellow servant rule, treated injured employee plaintiffs in the way that marine insurance law treated ship captains. In doing so the decision brought the maritime rules of risk management into employment relations on land. Levy, *Freaks of Fortune*, 7-21.

responsibility.”⁷ Furthermore, injured workers who did get compensation tended to face long delays, small awards, and costly legal fees.⁸

For much of the 19th century, the legal environment, which is to say, the law as an institution for making and governing the allocation of injury costs and of class relationships more broadly, was arranged against compensation for the injured much of the time. This led to a great many injured people and their families facing the costs of injuries with little support from employers. Dissatisfaction with the sense that many employee injuries went uncompensated led many Americans to believe that the problem of injury should be governed differently, as exemplified by calls for reform in injury law in the late 19th and early 20th century.

In an early wave of reform, numerous states passed legislation designed to open some gaps or to lower the wall of employers’ legal defenses. Economists Price Fishback and Shawn Kantor found that by 1901 seven states had created such legislation, making it easier for workers to win injury lawsuits. They note that many more states had laws applicable only to specific industries, like mining and railroad workers. By 1910, 23 states had such laws. They also count 154 state supreme court cases dealing with workplace injury in 1900. This number rose every year until 1909, when there were 484 such cases. Along with the rise in these cases, the amount of employers’ liability

⁷ David A. Moss, *Socializing Security: Progressive-Era Economists and the Origins of American Social Policy* (Cambridge: Harvard University Press, 1996), 63. For further discussion of the concept of externality see Aaron B. Wildavsky, *Culture and Social Theory* (New Brunswick: Transaction, 1998), 55-84; Robert A. Simons, *When Bad Things Happen to Good Property* (Washington, D.C.: Environmental Law Institute, 2006), 25.

⁸ Witt, *Accidental Republic*, 22-43. See also Friedman, “Civil Wrongs.”

insurance premiums paid more than tripled between 1900 and 1911.⁹ With liability laws, legislators attacked the trio of legal rules making up the employers' liability wall. In doing so, however, they preserved courts as the preferred institution for governing employee injury. Other reformers soon began to reject courts altogether when it came to governing over employee injury.

In part because of and in part in addition to legislative intervention, courts themselves eroded the liability wall in significant ways in different times and places as well.¹⁰ Several Midwestern state courts initially resisted the fellow servant rule, with the result that employers in those states in the 1850s were subject to significantly greater liability for employee's injuries. This particular window of liability closed by the 1860s, and so the wall of liability became harder to breach.¹¹ In some jurisdictions the legal wall warding off liability rose quite high: Christopher Tomlins writes that in the mid-19th century at least in some jurisdictions courts defined 'fellow servant' so broadly that "employers' immunity from liability would hold in circumstances where the injury to the employee was attributable to negligence on the part of persons in supervisory or even

⁹ Price Fishback and Shawn Everett Kantor, *A Prelude to the Welfare State: The Origins of Workers' Compensation* (Chicago: University of Chicago Press, 2000), 95.

¹⁰ The reasons for this erosion are complex. As discussed below, legal historian Peter Karsten attributes this in large part to the development of a form of jurisprudence driven by sympathy for the injured and suspicion of big businesses. It is also likely that judges were interested in preserving the role of courts in the governance of injury. This could be understood cynically in the sense of judges not wanting to lose social prestige by having their institutions demoted, or as judges wanting to keep themselves in business, but it could also be understood more charitably: at least some legal professionals likely believed in courts as important for the good of society and as good institutions of governance.

¹¹ Christopher Tomlins, *Law, Labor and Ideology in the Early American Republic*, (Cambridge: Cambridge University Press, 1993), 372-381

managerial positions.”¹² Just as this immunity grew, it could also erode, however. In the 1870s as courts began to distinguish workers’ fellow servants from employers’ vice-principals, ie, supervisors and managers, and so expanded employers’ liability.¹³

Legal historian Peter Karsten argues that from the 1850s onward courts developed an increasing willingness to compensate injured plaintiffs for pain and suffering, which increased damage awards.¹⁴ Karsten attributes this change in part to changes in political perspectives tied to the rise of Populism and the election of judges. One crucial component to this perspective was skepticism or even outright hostility toward big businesses, particularly railroads. As Karsten puts it, “as soon as careless corporations appeared on the scene, they were sent signals about accountability and carefulness via their ‘pocket nerve.’ These signals were sensitive to the pocket’s contents: The individual who assailed paid less than the doctor who delicted, who paid less than the careless city, which paid less than the reckless railroad.”¹⁵ Other big businesses faced difficulties in injury cases as well. Historian Paul Bellamy analyzed the records of courts in Cuyahoga County, Ohio and found that the American Steel and Wire Company, a U.S. Steel

¹² Tomlins, *Law, Labor and Ideology*, 369

¹³ Tomlins, *Law, Labor and Ideology*, 370

¹⁴ Peter Karsten, *Heart versus Head: Judge-Made Law in Nineteenth-Century America* (Chapel Hill: University of North Carolina Press, 1997), 276-290. See further discussion of damages for pain and suffering below. See also the discussion on pain and suffering in Barbara Young Welke, *Recasting American Liberty: Gender, Race, Law, and the Railroad Revolution, 1865-1920* (New York and Cambridge: Cambridge University Press, 2001), 125-136.

¹⁵ Karsten, *Heart versus Head*, 288-290.

subsidiary based in Cleveland, lost every one of the 127 lawsuits brought by injured employees between 1898 and 1915.¹⁶

As the law of employers' liability changed due to both legislation and courts' rulings, it became easier for plaintiffs to win their injury liability lawsuits. Whenever plaintiffs won, courts had to determine damages awards. To put the point more generally, as the governance of employee injury became more amenable to requiring employers to compensate employee injuries, courts had to spend more time on the subsequent problem of how to determine compensation. Plaintiffs who won their suits received a single sum in damages, but that sum had multiple determinants; damage awards were a single pool of money fed by multiple revenue streams. Damage awards involved two kinds of reasoning with which to assess loss: monetary and nonmonetary, or as courts often put it, pecuniary and non-pecuniary. In their deliberating about both non-pecuniary and pecuniary damages, courts commodified working-class people, their lives, and their experiences in different ways.

Non-pecuniary damages consisted of compensation for pain and suffering of both physical and mental varieties, disfigurement, and, for women, damages for miscarriages and loss of marriagability. These kinds of losses strained the meaning of 'compensation' almost to the breaking point, as judges and treatise writers repeatedly noted. All the law could provide plaintiffs with was money and yet, how could anyone declare a dollar value for fifteen minutes of agony, inability to marry, and so forth? For judges and

¹⁶ Paul Bellamy, "From court room to board room: Immigration, juries, corporations and the creation of an American proletariat: A history of workmen's compensation, 1898-1915," (PhD diss., Case Western Reserve University, 1994).

treatise writers, these nonpecuniary harms were not fully monetizable.¹⁷ All commodification involves measuring the commodified object, act, experience, or person via intellectual tools that abstract away some particular aspects of the commodity, in order to render it into an amount of money – a price. That price makes the commodity exchangeable with, which is to say, the monetary equivalent of some number of other commodities. In dealing with non-pecuniary damages, courts could not point to markets or other measurements: there was no established going rate for the purchase of an amputated hand or for time spent being burnt and crushed. As such, courts had few pre-existing financial equivalents or conceptual tools to draw on in commodifying plaintiffs' losses. As a result, when handling pain and suffering damages, courts themselves had to do the initial positing of equivalence, part of the mental work of commodification.

Judges and treatise writers may have been uncomfortable with the commodification of non-pecuniary losses and with the unsystematic character of non-

¹⁷ They must have been so for injured plaintiffs as well. Barbara Welke has recently discussed aspects of non-pecuniary harms under the heading "owning hazard," as part of a broader discussion of law and risk in the American culture and economy. The term owning hazard indicates in part that injured people and their loved ones bear costs well beyond financial costs. These costs are not transferable, and so fit poorly within institutional responses to harm that are predicated on equivalency. See Barbara Young Welke, "The Cowboy Suit Tragedy: Spreading Risk, Owning Hazard in the Modern American Consumer Economy," *Journal of American History* vol. 1, no. 1 (June, 2014): 97-121, and Barbara Young Welke, "Owning Hazard: A Tragedy," *UC Irvine Law Review* vol. 1, no. 3 (September, 2011): 693-771. The idea of owning hazard points out that nothing is fully monetizable in the sense that holding items, actions, experiences, or people to be equivalent always ignores important aspects of the things rendered equivalent. Equivalency exists only as a relationship, and whatever is related as equivalent is always more than that relationship: things, and especially people and their experiences, exceed their equivalency in a variety of ways. This also means that treating human losses through relationships of equivalence ultimately fall short of and perhaps even occlude and perpetuate those losses. The point also suggests a criticism of Karl Polanyi's distinction between fictional or artificial commodities and genuine commodities, because all commodification is fictive, in the sense of social artifice or construction. See Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 1944), 76, 79. For a similar distinction to Polanyi's see Michel Aglietta, *A Theory of Capitalist Regulation: The U.S. Experience*, 2nd ed. (London: Verso, 2000), 31, and Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin, 1985), 43.

pecuniary damages. Numerous legal scholars commented that while the law allowed damage awards for pain and suffering, which meant determining a dollar amount for pain, pain was not actually measurable in dollars. Legal scholar John Bouvier noted that while the feeling of suffering was compensable, this was not intended as “put[ting] up for sale, by agency of a court of justice” the pain and suffering that made the action grounds for a lawsuit.¹⁸ George Voorhies’s treatise on damages summarized the law as saying that there was no “fixed rule by which to assess the amount of damages to be awarded for physical pain and suffering caused by an injury. There is no standard amount for the measurement of such damages.”¹⁹ Voorhies added that

[n]o general rule can be given (...) for the reason that an injury which would cause little suffering in one person may be a source of great physical pain to another person. It may truly be stated that there is no measure of pecuniary compensation for pain and suffering. (...) There is no market in which the price of a voluntary submission to pain and suffering can be fixed. There is no market standard of a value to be applied (...) The word “compensation” in the phrases “compensation for pain and suffering” is not to be understood as meaning price or value but as describing an allowance looking toward recompense for (...) the suffering.²⁰

On Voorhies’s treatment, at law pain could be translated into a quantity of dollars and yet this quantification in units of currency was not to be understood as attaching a price to

¹⁸ John Bouvier, *A Law Dictionary: adapted to the Constitution and laws of the United States of America and of the Several States of the American Union With References to the Civil and Other Systems of Foreign Law, Volume 1*. (Philadelphia: J.B. Lippincott Company, 1892), 804.

¹⁹ George Voorhies, *Treatise on the Law of the Measure of Damages for Personal Injuries* (Norwalk: Laning, 1903), 64-65.

²⁰ Voorhies, *Treatise on the Law of the Measure of Damages for Personal Injuries* 66-67. The difference between price and recompense at the turn of the twentieth century is not as clear as Voorhies indicated. In both Bouvier’s and Black’s respective law dictionaries the term ‘recompense’ is used repeatedly with a sense of equivalence paid through money. If that is not a price, it has in common with price both overtones of exchange and measurement in money. John Bouvier, *A Law dictionary*, and Henry Campbell Black *A Law Dictionary Containing Definitions of the Terms and Phrases of American and English Jurisprudence, Ancient and Modern* (St. Paul: West Publishing Company, 1910)

pain. This left unanswered the question of how much was enough to constitute recompense for suffering. Similarly, the Georgia Circuit Court judge instructed the jury about how to determine damages in *Vicksburg and Meridian Railroad Company v. Putnam* saying that “money cannot pay for the pain and suffering. It only approaches to it; but he is entitled to some compensation for the pain and suffering. Now, that is left to the enlightened consciences of the jury.”²¹ In *Goodhart v. Pennsylvania R.R. Co.* the Pennsylvania Supreme Court likewise held that

Pain and suffering are not capable of being exactly measured by an equivalent in money, and we have repeatedly said that they have no market price. The question in any given case is not what it would cost to hire someone to undergo the measure of pain alleged to have been suffered by the plaintiff, but what, under all the circumstances, should be allowed to the plaintiff in addition to the other items of damage to which he is entitled, in consideration of suffering necessarily endured. This should not be estimated by a sentimental or fanciful standard, but in a reasonable manner.²²

The court continued, “some allowance [for pain] has been held to be proper; but, in answer to the question, “How much?” the only reply yet made is that should be reasonable in amount. Pain cannot be measured in money.”²³ Pain could not be measured in money and yet compensation had to be reasonable, and in appeals courts had to rule whether to uphold damage awards as reasonable or overturn them as unreasonable. It is hard to see anything but a contradiction here, since a reasonable amount of compensation is still an amount meant to be commensurate with the injury, which is to say, a measurement in money. The Pennsylvania court insisted that compensation that gave

²¹ *Vicksburg and Meridian Railroad Company v. Putnam*, 118 U.S. 545 (1886).

²² *Goodhart v. Pennsylvania R.R. Co.*, 177 Pa. 1 (1896).

²³ *Goodhart v. Pennsylvania R.R. Co.*

quantities of money in response to pain and suffering was not in fact the measurement of pain in money, and yet courts were precisely measuring pain in money. The insistence that the law did not do so likely displays anxiety about what was and was not appropriate to value via markets and commodification. Pain as marketable probably made people uneasy.

The Pennsylvania court made an instructive comparison in its ruling in *Goodhart v. Pennsylvania Railroad*, comparing pain with disability. While pain was not subject to market measurements, disability was, because the court defined disability as time which injured people could not spend earning income as a result of their injuries. Disability as defined by injury-imposed time away from waged work meant that a successful plaintiff should receive the amount of “money as the injured man might have reasonably earned in the same time by the pursuit of his ordinary calling.”²⁴ It is worth pointing out here that the legal understanding of disability included the idea that disability meant lack of ability to work, where work was defined narrowly as waged work.²⁵ This lack was graded: rather than able/unable to work, there was a continuum of ability/disability. The understanding of disability as inability to work would become more prominent over the 20th century, and it has important precursors in the law of damages.²⁶ Plaintiffs and their attorneys

²⁴ *Goodhart v. Pennsylvania R.R. Co.*

²⁵ Chapter two discusses the way this equation informed workmen’s compensation laws. On the U.S. history of the reduction of the meaning of work to waged work and the gender of that reduction, see Jeanne Boydston, *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic* (New York, 1990) and Reva Siegel, “Home As Work: The First Woman’s Rights Claims Concerning Wives’ Household Labor, 1850-1880,” *Yale Law Journal* vol. 103 (1994): 1073-1217.

²⁶ The equation of disability with inability to work made disability unproblematic for the purposes of determining damage awards. This equation remains in the U.S., and likely shapes hiring decisions by employers, thus rendering many people with disabilities unable to find employment. It is important to note,

often gave voice to the idea that disability meant inability to work, claiming that injuries rendered them unable to work in the future. Nettie Blom argued that with her injury “my only means of support had been taken from me.”²⁷ Kathryn Carlin’s lawyer stressed that Carlin would “never again be able to do any work or to earn a livelihood” after her injury on an ironing machine.²⁸ He continued: “what can the plaintiff do in the way of manual labor? She is uneducated, a domestic, or a waiter, and engaged in laundry work when hurt. She cannot perform such work in the future. She can move about and can do little things requiring only use of one hand. But it is difficult to imagine an employment, open to her, in which she can earn any wages.”²⁹ Courts often did not comment on plaintiffs’ and their lawyers’ claims that injury meant never being able to work again. This might indicate implicit agreement by the court and the defendant employers that the plaintiffs were correct when they said that they would never work again as a result of their injuries.

however, that ability to perform labor and ability to be employed are only somewhat related. Anyone who has ever had a prolonged job search can attest to this fact. The equation of disability with inability to work had two different facets, an emphasis on bodies and an emphasis on labor markets. These two facets roughly correspond to an understanding of disability as socio-political condition and to disability as a medical condition. For an extensive discussion of disability as inability to work in American history, see Sarah Rose, “‘Crippled’ Hands: Disability in Labor and Working-Class History,” *Labor: Studies in Working-Class History of the Americas* 2, no. 1 (2005), 27-54, and Sarah Rose, “No Right to be Idle: The Invention of Disability” (PhD diss., University of Illinois at Chicago, 2008). Rose traces the historical processes by which disability came to mean inability to work, and how this notion was both the result of and a presupposition of American social policy. For additional work on disability history more broadly, see Kim E. Nielsen, *A Disability History of the United States* (Boston: Beacon Press, 2012); Barbara Young Welke, *Law and the Borders of Belonging in the long Nineteenth Century United States* (Cambridge and New York: Cambridge University Press, 2010); Susan Schweik, *The Ugly Laws: Disability in Public* (New York: New York University Press, 2009); Paul K. Longmore and Lauri Umansky, eds. *The New Disability History: American Perspectives*, (New York: New York University Press, 2001).

²⁷ *Blom v. Yellowstone Park Association*, 86 Minn. 237 (1902), 49.

²⁸ *Carlin v. Kennedy*, 97 Minn. 141 (1906), 11.

²⁹ *Carlin v. Kennedy*, Respondent’s Brief by Samuel A. Anderson, 23-24.

When courts did discuss injured plaintiffs' future prospects for work, they expressed agreement with this sentiment.

In 1904, Kathryn Carlin won a suit against the owner of the industrial laundry where she worked. Her employer appealed, claiming that the damages were too high. In deciding the defendant's appeal in favor of Carlin, Minnesota Supreme Court Justice Lewis wrote that "[t]he damages awarded were high, but not, in our opinion, excessive. Respondent's left hand was so badly crushed and deformed as to render it practically useless."³⁰ In the decision for Carlin, Justice Lewis cited another case, that of Charles Thompson, a railway conductor who lost one leg below the knee. In the decision for Thompson the court stated that Thompson's injury "totally incapacitated him from following his chosen occupation, and he must seek a new field of labor, handicapped by the loss of his good right leg."³¹

Plaintiffs' and their attorneys' equation of disability with inability to work was plausible for courts and in a sense it was convenient. Non-pecuniary damages involved

³⁰ *Carlin v. Kennedy*, 11. In another injury suit, that of Edith Graseth, the Minnesota Supreme Court found that after her accident Graseth's "hand and forearm are practically useless." *Graseth v. Northwestern Knitting Co.*, 128 Minn. 245 (1915)

³¹ *Thompson v. Great Northern Ry. Co.* 82 N.W. 637 (1900). These decisions differed subtly in their construction of disability. In Carlin's case, the decision focused more on the damaged limb, which had been rendered useless by the injury, emphasizing what the court thought Carlin could and could not do with her body as a result of the accident. In Thompson's case, the decision focused on Thompson's employment prospects in relation to his past career: Thompson would not be able to work as a conductor anymore, he would need to find other work in another field, and his amputated leg would limit his range of options in doing so. It is likely that the difference between these two constructions of disability arose from differences within what Alice Kessler-Harris has called "the gendered imagination" at the time, meaning the understandings of the proper places and activities for men and women. Women were imagined fundamentally as belonging in domestic space while men were imagined in waged employment, hence the emphasis in Thompson's case on employability and the emphases in Carlin's and Graseth's cases on bodily 'uselessness', a trait with ramifications beyond waged employment. Alice Kessler-Harris, *In Pursuit of Equity: Women, Men, and the Quest for Economic Citizenship in 20th-Century America* (New York: Oxford University Press, 2001), 4.

applying a necessarily imprecise measurement to an object that was at best only partially appropriate to that standard of measurement: how much is \$100 in pain? Is my pain the same as yours? Judges tended to see answering these questions as an exercise that could in important respects only fail, and which could not be systematized. Pecuniary damages like disability, however, formed a more stable and less fraught area of legal reasoning.

In *Goodhart v. Pennsylvania*, the court asserted that disability meant time away from waged work and that this was an amount “capable of exact compensation.”³² This exactitude was in fact speculative: time away from waged work was only known exactly after a plaintiff had convalesced and returned to work. Many injured plaintiffs brought suits prior to recovering from their injuries, because they could not afford to wait to heal and return to work before filing suit. This means in part that for courts labor markets were a more stable mental object than pain, one that courts could draw on with a greater sense of precision. Defining disability this way meant that damages for disability posed none of the problems of measurement provided by damages for pain and suffering.³³

Pecuniary elements of damages included costs for the injured party’s medical care, time away from waged work or business that resulted in lost income, and estimates of lost future earnings or lost earning capacity. In treating disability as time away from waged work and lost earnings the Pennsylvania court embodied a kind of reasoning common in the insurance industry, which would later be taken up within workmen’s

³² *Goodhart v. Pennsylvania R.R. Co.*

³³ Pain and suffering damages also raised the dollar amount of awards. This provided one motivation for employers to oppose employers’ liability laws and to support workers’ compensation legislation, which removed pain and suffering damages. See *Hearings Before the Committee on the Judiciary on Employers’ Liability and Workmen’s Compensation* (Washington: GPO, 1912), 284, 375, 379.

compensation legislation. The relative stability of this reasoning process as courts understood it likely shaped the legal understanding of disability.³⁴ Disability was measured in duration and degree: injuries could cause disabilities that were temporary or permanent, and that were partial or total. The least serious kinds of compensable injury, then, would result in a temporary partial disability, such as breaking one hand which took several weeks to heal, while the most serious kinds of injury would be a permanent total disability, such as the amputation of all four limbs. Both degree and duration of disability were grounded in labor markets, which for courts formed a more stable and reliable mental object than pain and suffering. In using notions of disability in damage awards, courts could look at past earnings and plaintiff's ages, then make projections into the future about what the plaintiffs probably would have earned if they had not been injured. How long and how much would the disability prevent someone from earning what they used to earn?

Employers' legal defenses were a shifting patchwork with occasional holes in different jurisdictions at different times for different sorts of companies.³⁵ While liability

³⁴ See discussion below on courts' use of conceptual tools developed in the insurance industry. On the insurance industry, and its historical and cultural significance, see Daniel Bouk, "The Science of Difference: Developing Tools for Discrimination in the American Life Insurance Industry, 1830-1930," (PhD diss., Princeton University, 2009); Caley Horan, "Actuarial Age: Insurance and the Emergence of Neoliberalism in the Postwar United States," (PhD diss., University of Minnesota, 2011); Jonathan Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America* (Cambridge: Harvard University Press, 2012); Sharon Murphy, *Investing in Life: Insurance in Antebellum America* (Baltimore: Johns Hopkins, 2010); Susanna Blumenthal "Death by his own hand': Accounting for Suicide in Nineteenth-Century Life Insurance Litigation," in Andrew Parket, Austin Sarat, and Martha Merrill Umphrey, eds., *Subjects of Responsibility: Framing Personhood in Modern Bureaucracies* (New York: Fordham University Press, 2011): 98-144.

³⁵ These holes in employers' legal defenses may seem minuscule and none of this is an argument for their adequacy or laudability, but it is important that there was not an airtight seal warding off all liability for employers. The local and temporary windows of increased liability for some employers bear further study

changed, reformers generally spoke as if the walling off of employee risk from employer liability remained in place, at least enough to warrant workmen's compensation legislation shifting the handling of injuries out of courts. Injury law reformers largely ignored the changes in employers' liability but had they noticed they would have seen these changes as inadequate. A negligence-based system of employee injury compensation meant that some wage-earners would suffer injuries and receive no compensation. Injury law reformers rejected this scenario as unacceptable. Reformers sought standardization of the rules of liability, and more fundamentally argued that all injuries in the course of employment ought to be compensated.³⁶

and suggest that the diagnosis of a general and national legal "culture of noncompensation" is overstated. See Lawrence M. Friedman, "Civil Wrongs: Personal Injury Law in the Late 19th Century," *American Bar Foundation Research Journal* Vol. 12, No. 2/3 (Spring - Summer, 1987), 351-378. See also Peter Karsten, *Heart versus Head*, 255-263 and Paul Bellamy, "From Court Room to Board Room," vii and viii, both arguing against Friedman. There was an overall national trend toward not compensating injuries, certainly not compensating injuries in an adequate manner, but the trend had important variations and counter-trends. Averages matter, but so do instances. It is more likely that there was not a single culture of non-compensation so much as a confederacy or archipelago of injury cultures.

³⁶ This treatment of reformers requires some clarification. The point is not to suggest that the commodification of persons and thinking in aggregates was the only salient trait of injury law reformers. Still, this was the trait that came to shape injury law as a result of these reformers' efforts, and it is their role in shaping injury law that is the focus of this dissertation. As Maureen Flanagan has argued in her *America Reformed*, there were a plurality of perspectives present among reformers. Flanagan, *America Reformed: Progressives and Progressivisms, 1890s-1920s*. (New York: Oxford University Press, 2007). This approach is illuminating and it is worth remembering that from the right perspective any group of people, and indeed any individual person, contains a multiplicity of diverse perspectives and values. See also Steven Piott, *American Reformers 1870-1920* (Lanham: Rowman & Littlefield Publishers, 2006). This chapter's emphasis on reformers and commodification is also not intended to caricature or villainize reformers as cynically let alone conspiratorially seeking to preserve social relationships that they understood as unjust. Injury law reformers genuinely cared about people's lives, which is why they sought to create reform. As economist and Wisconsin Industrial Commissioner John R. Commons put it in his 1934 autobiography, "I was trying to save capitalism by making it good." Commons, *Myself: The Autobiography of John R. Commons* (New York: MacMillan, 1934) This attempt at saving and making good expressed a commitment to both a social vision and to the individual lives that would be improved as a result. Commons's goal, and the approach within injury law reform circles more broadly, was to eliminate social ills by changing the legal rules that structure collective life in capitalism, which was supposed to result in social improvements. That was a laudable goal, and yet at the same time this effort involved treating working class people as economic factors, in keeping with the goal of preserving capitalism. For

Reformers attacked courts' handling of wage-earners' injuries, dramatizing injury as a political question with grave stakes, as implied in their use of military metaphors. Actuary E. H Downey wrote that "[t]he annual reports of deaths and injuries from industrial accidents read like the returns of a great battle."³⁷ In 1910, journalist William Hard described conditions at the Illinois Steel Company by saying "Steel is War."³⁸ He wrote that "the record of the long battle in the cave of smoke on the north bank of the Calumet River for the year 1906 would therefore present 59 killed and wounded men to the consideration of a public which would be appalled by the news of the loss of an equal number of men in a battle in the Philippines." Similarly Charles Henderson of the Illinois Workingmen's Insurance Commission described watching a library being built. Seeing

the men climb up along those iron structures (...) made me shiver when I thought of the possibility of their falling. But such men never quail; they go right on, and that is why they are called reckless. But of what value is a railroad man who is always watching to see that he does not get his fingers pinched, or that he does not lose his limb? Of what use is a soldier in battle who is looking for a safe place? All these men are engaged in battle, the battle against starvation; and they must be brave men; so, let us do with them as we have done with our veteran soldiers; let them be as careful as they can; but when they fall in this struggle for our wealth, let us take care of them.³⁹

more on Commons and the American Association for Labor Legislation, a group of reformers and academics influential in injury law reform, see David A. Moss, *Socializing Security: Progressive Era Economists and the Origins of American Social Policy* (Cambridge: Harvard University Press, 1996).

³⁷ E.H. Downey, *History of Labor Legislation in Iowa* (Iowa City: State Historical Society of Iowa, 1910), 183. At the risk of over-reading, there may be a lingering determinism or fatalism in the use of military metaphors. It is difficult to imagine wars in which no one is killed. To hold that the economy is war, then, might be to suggest that economies by their normal operations kill people. If this implication is present in Downey's and others' military metaphors, then in evaluating this implication descriptive shades into prescriptive, because one's evaluation of these metaphors will differ if one believes that it might be possible to have complex economies in which no one was killed in employment. It is tempting to call the idea of a fatality-free economy utopian, and yet this concedes the important normative point that economies should be fatality free.

³⁸ Hard, *Injured in the Course of Duty*, 18.

³⁹ Charles Henderson, *Compensation or Insurance versus Employers' Liability: Address at the Sixteenth Annual Meeting of the Central Supply Association* (n.p.: 1910), 59.

In a speech he gave in 1910, James Harrington Boyd, President of Ohio's Employer's Liability Commission, said that

the best estimate of the number of persons injured and killed in industrial accidents in 1909 is 536,000 people. What does this mean? Let us see. In the battle of Gettysburg, which lasted three days of actual fighting, there were killed, wounded, and missing 43,500 soldiers. If therefore you were to have a battle of Gettysburg in one of each of twelve divisions of the United States (...) you would not create quite the damage and destruction which takes place yearly in the industrial activity of the United States.⁴⁰

By his comparison with the Civil War, Boyd dramatized the severity and gravity of the problem of injury and compensation. Often, however, reformers addressed the problem of workplace injury in terms with a very different political – or rather, apolitical – charge, discussing injuries in more dispassionate statistical and economic terms.

Injury law reformers argued that the costs of injuries ran high and were irrationally allocated because of courts. Social investigator Crystal Eastman argued that the annual cost of workplace injuries in just one county in Pennsylvania was five million dollars per year.⁴¹ Eastman noted that these injury costs were paid, but by the wrong people. James Harrington Boyd addressed the problem of injury in statistical terms, noting that “in 1870, 70 per cent of our population lived on the land and only 30 per cent in towns and cities. But today more than 65 per cent live in towns and cities and only 35

⁴⁰ Boyd's speech was published the following year as a pamphlet. James Harrington Boyd, *Workmen's Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents* (Columbus: The F. J. Heer Printing Co., 1911), 24.

⁴¹ Crystal Eastman, *Work-Accidents and the Law* (New York: Survey Associates, 1916), 317.

per cent live on the land.”⁴² As a result, more working people were exposed to industrial hazards and had fewer resources to provide for security in the event of calamity.⁴³ Boyd used records from the insurance industry to argue that the system of injury compensation was wasteful. He found that in 1906 and 1907 companies issuing employers’ liability insurance received \$23,524,000 in premiums but only paid out \$8,560,000 to injured employees, thus wasting \$14,964,000. “Nothing could more strikingly set forth the waste of the present system. Only 36.34 per cent of what employers pay in premiums for liability insurance is paid in settlement of claims and suits. Thus, for every \$100 paid out by employers for protection against liability to their injured workmen, less than \$37 is paid to those workmen.”⁴⁴ What was more, Boyd continued,

Out of this 36.34 per cent the injured employe must pay his attorney. The same report shows that the attorney gets 26.13 per cent of what is paid to the injured employe. This investigation covers forty six cases where the recovery was above \$1500 each. In small recoveries the attorney fees take a larger proportion. This report shows that not more than somewhere between 20 and 25 per cent of the money paid by the employing class goes actually into the pockets of injured workmen for their dependent families in death cases.⁴⁵

Boyd especially decried the inefficiency of this state of affairs. Economist and statistician E.H. Downey made a similar argument, noting that in Iowa employers paid \$1,592,770 in liability insurance premiums between 1902 and 1912, of which 51% or \$814,037 went

⁴² Boyd, *Workmen’s Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents*, 6.

⁴³ For a discussion of some of the ways wage earners sought security in the face of the hazards of their working lives, see Levy, *Freaks of Fortune*, 150-230, and Witt, *Accidental Republic*, 71-102.

⁴⁴ Boyd, *Workmen’s Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents*, 7.

⁴⁵ Boyd, *Workmen’s Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents*, 8.

into settling claims.⁴⁶ Similarly, William Hard claimed that from 1894 through 1905, employers paid out almost 100 million dollars in employers' liability insurance premiums, while these insurance companies paid only about forty-four million dollars in compensation to injured employees. Hard estimated that at least one third of payments to workers were eaten up by legal costs, so that the injured workers only actually received about thirty million dollars, meaning that employers paid one hundred million dollars yet less than a third of that payment went to injured workers. Hard hastened to add that neither insurers nor lawyers "make excessive profits." Insurers' "money was spent in getting the business and in fighting pitched legal battles against the injured workmen's lawyers." The lawyers for the injured were not "making excessive profits, either. They have to fight long fights to get those verdicts. Nobody is personally to blame. They are all creatures of the system."⁴⁷ That system, Hard argued, was incredibly wasteful.

In addition to arguments about injury law being unnecessarily expensive, reformers used economic metaphors that represented working class people as an economic resource. They argued in effect that there were immediate political economic interests in workers' health such that the wealth of nations depended on the health of workers. These arguments implicitly and explicitly relied upon economic metaphors about working people as factors of production.⁴⁸

⁴⁶ E.H. Downey, *History of Work Accident Indemnity in Iowa* (Iowa City: State Historical Society of Iowa, 1912), 157.

⁴⁷ Hard, *Injured in the Course of Duty*, 95.

⁴⁸ Reformers' treatment of working people in economic terms raises theoretical questions about economies and language. In one sense of the term 'economy', all of society is economic and is part of 'the economy,' because there are costs and benefits to activity. In this sense, every negative effect of work is a cost, and every positive effect is a benefit. At the same time, 'economy' is often understood more narrowly to refer

In an address to the Iowa Employers' Liability Commission, judge Nathaniel

French asserted that

The workman, now almost always an employe [sic], is an essential factor of society. An adequate supply of workmen, and the more skillful the better, is of untold economic value to the state. The supply will be most adequate, other things being equal, in the state which protects them so far as may be from accidents, and which compensates them for the injury when the misfortune of an accident befalls them. While much legislation has been and will be enacted to protect them from accident there is great public need of a just and comprehensive law to afford compensation for accidental injuries resulting from their employment.⁴⁹

James Harrington Boyd likewise declared that in an era that had become newly sensitive to the need for conservation of natural resources, Americans were insufficiently aware of the need for "the conservation of the human being, the conservation of the working man, who is the corner-stone of the state."⁵⁰ Charles Henderson of the Illinois Workingmen's Insurance Commission similarly argued that there was a desperate need for "human conservation." Henderson worried that the rate of consumption of workers was so high that industry would use up so many workers that there wouldn't be enough left to do business. He said at a public speech that

Economists show that there are two prime sources of wealth. One of these is the material of nature (...) and the other is labor (...) and health of workmen,

to money, and to costs and benefits rendered in monetary terms. It is in this sense that it makes sense to talk about negative and positive externalities. Metaphor may be important to the relationship between these two senses of 'economic.' To put it another way, there are phenomena which at any given moment are 'economic' in the more expansive sense but not in the more restricted sense. This is partly because the definitions of what are negative externalities and what are costs of production are set by law and policy. Changing the current allocation of costs by moving a negative externality into a cost of production involves some work with metaphors, in order to say, in effect, 'in one sense of economy, these phenomena are economic; policy should be changed so that they become economic in the second sense of the term, and so become properly paid for.'

⁴⁹ Iowa Employers' Liability and Workmen's Compensation Commission, *Report of Employers' Liability Commission*, 246.

⁵⁰ Boyd, *Workmen's Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents*, 5.

regarded merely as a simple instrument, is vital for the production of wealth. (...) We should conserve our labor power more than anything else, and we are destroying it through negligence, not criminal intent but by criminal neglect.⁵¹

Reformers' discussion of injury through economic metaphors presented the definition of the problem of injury in a rather narrower way than narrative treatments of injury. While reformers who used economic metaphors still discussed injury as a matter of justice, it became an attenuated form of justice: just treatment of workplace injuries presumed the continuation of workplace injuries, and reduced justice here to proper monetary compensation. Having metaphorically rendered working people as costs and factors of production, it was only a short step to frame injuries as an issue of economic efficiency and rational cost allocation, often buttressed again with statistical claims.

Statistics lent a kind of plausibility to projections about what might be going on, in the absence of more complete evidence. William Hard used German accident statistics to speculate about injury rates in the U.S. steel industry: "for every man killed in Germany there were eight who suffered a permanent disability of either a partial or a total character. It further appears that for every man killed, four were disabled temporarily, which, in the German statistics, means for at least thirteen weeks." Hard speculated that "[i]f the law of averages is the same in Chicago as it is in Berlin (and there is no reason to suppose that it isn't)," then he could derive an estimate of injuries at US Steel's South Chicago plant. He guesstimated that with 46 workers killed, then there were likely 184

⁵¹ Henderson, *Compensation or Insurance versus Employers' Liability*, 54. Marian Moser Jones has noted that American Red Cross officials in this era similarly discussed their efforts as a form of conservation of human resource. See Marian Moser Jones, *The American Red Cross from Clara Barton to the New Deal* (Baltimore: Johns Hopkins University Press, 2013), 146-147, 154.

disabled for 13 weeks or more, and 368 disabled permanently in accidents.⁵² Hard pointed out that “it should be remembered that the estimate here given does not include any of those men who suffered injuries which disabled them for a period of less than the thirteen weeks,” injuries which were much more numerous. He estimated that “at least 1,200 men who were involved in accidents of all kinds” at that plant.

Doctors who have been employed in the hospital of the Illinois Steel Company place the number even higher. They have said that there are at least 2,000 accidents every year. But many of these accidents extend only to the painful scorching of a leg. If the figure be kept at 1,200, it will be a conservative estimate, including only those injuries that may be legitimately regarded as being of material consequence.

Hard's guesswork is not an accurate representation of what actually happened at this steel plant with regard to injuries, though the doctors he referenced are a more reliable source. What Hard does demonstrate clearly, however, is a growing use of statistical reasoning in thinking about the problem of workplace accidents, and that this growth went in tandem with a shift in how the problem of injury was defined.⁵³ Hard stressed that the Illinois Steel Company was not exceptional but rather exemplary.

Here then, is the record of one American industrial establishment for one year! It is not an establishment that enjoys any preeminence in heartlessness. If it were, there would be no use in writing an article about it. The exceptional proves nothing. But the plant in South Chicago is just an American plant, conducted

⁵² Hard, *Injured in the Course of Duty*, 4.

⁵³ See the discussion below on scholarly treatment of the relationship between statistical reasoning and the administrative state. My thoughts on the history of statistics are shaped by recent scholarship on statistical reasoning, risk, and insurance in American history. See Daniel Bouk, “The Science of Difference: Developing Tools for Discrimination in the American Life Insurance Industry, 1830-1930,” (PhD diss., Princeton University, 2009); Caley Horan, “Actuarial Age: Insurance and the Emergence of Neoliberalism in the Postwar United States,” (PhD diss., University of Minnesota, 2011); Jonathan Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America* (Cambridge: Harvard University Press, 2012); Sharon Murphy, *Investing in Life: Insurance in Antebellum America* (Baltimore: Johns Hopkins, 2010).

according to American ideals. Its officials are men whom one is glad to meet and proud to know. And yet in the course of one year in their plant they had at least 1,200 accidents that resulted in the physical injury, the physical agony, of human beings.⁵⁴

With their use of statistics, reformers sought in part to show how widespread injuries were. Combining accident statistics with economic metaphors, reformers sought to show that injuries were frequent and expensive. When injuries happened, someone paid for them. The primary problem, then, was that the wrong people were paying. The issue of justice with regard to workplace injury became largely a matter of making sure the right person paid the bill. As legal scholar Ernst Freund put it:

The principle that inevitable loss should be borne, not by the person on whom it may happen to fall, but by the person who profits by the dangerous business to which the loss is incident, embodies a very intelligible idea of justice. The system being responsible for the loss, why should it not be constitutional to distribute the loss among the beneficiaries of the system? In a large sense the community is certainly interested in averting sudden and unexpected losses as well as the destitution following from sickness and disease, and the distribution of these losses over a large number through insurance is a legitimate end of governmental policy.⁵⁵

As Crystal Eastman put it, what was needed was “to effect a more rational distribution of the loss entailed by” workplace injuries. The irrational distribution of injury costs created additional unnecessary suffering, Eastman argued. She noted that “leav[ing] the economic burden of work-accidents wholly upon the workers (...) not only does them an injustice, but makes out of a largely necessary loss an absolutely unnecessary amount of

⁵⁴ Hard, *Injured in the Course of Duty*, 5.

⁵⁵ Quoted in Boyd, *Workmen's Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents*, 27. The quote is from Freund's *The Police Power, Public Policy and Constitutional Rights* (Chicago: University of Chicago Press, 1904), 658.

privation” by failing to spread the costs of injuries.⁵⁶ Instead of this, she said, lawmakers should create “a just distribution of the economic loss” involved in injuries.⁵⁷

Injury law reformers argued that courts were inadequate to the problem of workplace injury, but more than that they argued that courts could not be otherwise than inadequate.

Reformers used statistics to attack a core component of the reasoning involved in court-based injury law. Under the court-based system, liability for risk and fault for accident were intimately related. The law presumed that work was safe provided all involved were competent and did their duty, and understood injuries as resulting from failures to act in line with duty. Thus injury lawsuits turned on questions of whether employers had been negligent in their duties. From this perspective, injuries had clear perpetrators who had done something wrong, either a negligent employer or a negligent employee. E.H. Downey summarized the law of employers’ liability this way: “unless the master is remiss (...) the servant will have no ground of action against him. For without breach of duty there is no negligence, and without negligence there is no liability.”⁵⁸

Reformers argued that many injuries did not fit within this framework. In industrial environments everyone could do their duty and yet someone might still be disabled or killed. This point formed a direct attack on the forms of reasoning behind workplace injury law, because workplace injury law centered on the question of fault. In

⁵⁶ Eastman, *Work Accidents and the Law*, 165. Eastman’s claim that workers’ and their families’ losses in injuries were “largely necessary” expresses a kind of statistical determinism, treating injuries as ineliminable.

⁵⁷ Eastman, *Work Accidents and the Law*, 5

⁵⁸ Downey, *History of Labor Legislation in Iowa*, 155.

courts, workers could only receive compensation when their employers were at fault for their injuries. By arguing that no one was at fault in many injuries, reformers argued that these injuries would continue to go uncompensated in courts. E.H. Downey wrote that “[f]or most of these deaths and injuries [arising out of employment] our law affords no remedy.”⁵⁹ To press this point, reformers again turned to statistical reasoning. As James Harrington Boyd put it, “the common law does not pretend to furnish any remedy or relief, except in those cases in which the employer is negligent; and the best figures indicate that these do not exceed twenty per cent of all injuries.”⁶⁰ William Hard quoted estimates that between eighty and ninety percent of work accidents were not due to fault.⁶¹

The specific numbers differed, but reformers found that in many cases workers were injured in cases where no one was clearly at fault. In a survey of 501 accidents, Crystal Eastman found that 117 were the fault of no individual.⁶² She argued that these rates were likely not exceptional and that over all a significant proportion of injuries were no one’s fault. E. H. Downey cited statistics from the German Imperial Insurance Office, which found that more than forty percent of employee injuries were “due to inevitable accidents connected with employment.” Not being any individual’s fault, these kinds of injuries were not compensable under the American legal system. “These statistics are the indictment of the Common Law of employers’ liability,” Downey wrote. “They make it

⁵⁹ Downey, *History of Labor Legislation in Iowa*, 183.

⁶⁰ Boyd, *Workmen’s Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents*, 24.

⁶¹ Hard, *Injured in the Course of Duty*, 54.

⁶² Eastman, *Work Accidents and the Law*, 86.

clear that a rule which permits recovery only for the negligence of the master (...) throws the chief burden of industrial accidents upon those least able to bear it themselves or to shift it to others.”⁶³

The attack on fault as the decisive issue cut against a reasoning process key to the court-based system of injury law. Crystal Eastman wrote that “[i]t is a fundamental doctrine of the civil law that if a loss is to be suffered he who is at fault shall suffer it, in order to both secure justice between individuals and to prevent future faults of the same kind.” And yet, the emphasis on individual fault resulted in losses being suffered by faultless actors. As such the law helped neither to “secure justice” nor “to prevent future faults.”⁶⁴ Charles Henderson of the Illinois Workingmen’s Insurance Commission argued that the emphasis on fault made the court-based system of injury compensation outmoded in the contemporary American industrial economy. In many accidents no fault existed, and so the court system had nothing to say in these instances. He said “I have never known a man who wanted to injure or poison one of his workingmen; but nevertheless these things occur, and the employers’ liability law renders conditions worse, for it assumes someone has done intentional wrong. That fundamental falsehood is at the heart of our present law.”⁶⁵ The U.S. Industrial Commission similarly suggested that employers’ legal defenses were a holdover from a “lower stage of civilization” in which injuries arose from “personal carelessness on the part of the workers.” In more recent conditions, however, each worker was “but a single private in an army,” working “in a

⁶³ Downey, *History of Labor Legislation in Iowa*, 183

⁶⁴ Eastman, *Work Accidents and the Law*, 5.

⁶⁵ Henderson, *Compensation or Insurance versus Employers’ Liability*, 57

great institution, over the conditions of which he has little control.” Machines used motor power of their own and working conditions were “chiefly determined by his employer and his fellow-workmen.”⁶⁶ Under these conditions, individual workers could no longer control working conditions nor avoid injury by being prudent. In a sense, the Industrial Commission suggested that there had been a kind of aggregation or collectivization in social practice, in which many employees became subsumed within the machinery of large-scale industry. This practice of economic and social aggregation had its analogs in the aggregating forms of reason that reformers used.

For injury law reformers, the issue of wageearners’ injuries needed to be removed from courts entirely because the courts were incapable of thinking about injuries in the way that the problem of injury demanded. As William Hard put it, “the deep-down vice of our present system of awarding compensation for accidents is that it depends on litigation.”⁶⁷ Hard’s emphasis on litigation expresses a sense among reformers that the problem with injury law was not actually existing courts, but any possible courts. Any litigation-based system of injury law would be inadequate. The difference here between reformers and courts was one of perspective on economic life. Courts focused above all on individual employees and employers as transactors in the marketplace. Essentially, courts sought to allow markets to operate, and intervened when actors violated the rules

⁶⁶ U.S. Industrial Commission, *Final Report of the Industrial Commission*, (Washington: Government Printing Office, 1902), 893-894.

⁶⁷ Hard, *Injured in the Course of Duty*, 61.

of the market.⁶⁸ Courts here expressed an understanding of law rooted in ideas of so-called laissez-faire liberalism. Reformers on the other hand sought changes to the rules of the market through legislation rather than litigation, and with a different vision, an insurance-based administrative system rather than a court-based system of injury law. Reformers reflected a new emerging form of liberalism, social liberalism.

Historians generally agree that American liberalism transformed in the late 19th and early 20th century. Alan Dawley characterizes the period from the opening of the 20th century to the end of the 1930s as a gradual shift from ostensible laissez-faire to “liberalism with a social face.” The key word to this new social liberalism in Dawley’s view “was neither liberty nor equality, but security.”⁶⁹ The shift within American liberalism that Dawley narrates involved conflict among various actors committed to different ideas about elements including forms of state intervention in economic life and the growth of the administrative state.⁷⁰ Historian Mary O. Furner argues that there were conflicts between “two different conceptions of new liberalism” from the 1880s onward.⁷¹

These two different conceptions of liberalism involved different visions of economic life, economic security, and the role of government. Jonathan Levy notes that

⁶⁸ At the same time, law is not merely reactive but constitutive: the process of deciding what the rules of the market were and what was or was not a violation of those rules was itself a process that changed those rules over time. Still, in hearing suits, courts generally took the existing legal and economic rules that pre-existed the suit and assessed the conduct of disputants according to those rules.

⁶⁹ Dawley, *Struggles for Justice*, 4.

⁷⁰ *Struggles for Justice*, 64,163.

⁷¹ Furner, “The Republican Tradition and the New Liberalism,” 194, in *The State and Social Investigation in Britain and the United States*, ed. Michael J. Lacey and Mary O. Furner.

“life insurance was a liberal form of economic security” based on commodifying the life of the insured.⁷² Life insurance was specifically an individual and laissez-faire liberal form of economic security. Reformers called for a different sort of liberal economic security, one focused on not on individual lives but aggregates, many people’s lives as groups. As this chapter argues, though, reformers’ preferred methods for dealing with employee injuries were also based on commodifying life and on insurance concepts. A key difference between courts and reformers, then, was that reformers thought in ways that theorist Michel Foucault characterized as biopolitical. Biopolitical forms of power are directed at collective entities like populations. More specifically, they are aimed at managing uncertainty and probability within collective entities, phenomena like rates of accidents, births, illness, and deaths.⁷³ For Foucault, biopolitics refers to efforts to create security in the face of uncertainty, including economic security, within the political-economic framework of liberalism and capitalism.⁷⁴ In these terms, then, William Hard and other reformers’ rejection of any court-based system of injury law was a matter of these reformers believing that the problem of injury required a biopolitical response, and believing that courts could not practice biopolitics. That is to say, Hard and other reformers believed that the problem of injury required a response that treated working

⁷² Levy, *Freaks of Fortune*, 61. Levy’s *Freaks of Fortune* sheds much light on the changing relationship between liberal individualism and ideas of security, risk, and freedom from the early 19th to the early 20th century, and highlighting the ways that risk was and continues to be at the heart of American capitalism.

⁷³ Michel Foucault, *Society Must Be Defended*, 243-246; see also *Security, Territory, Population*, 42, 79.

⁷⁴ Michel Foucault, *The Birth of Biopolitics*, 65, 69. Foucault associated biopolitics with the rise of liberalism and more specifically with efforts to create security in the face of uncertainty, including economic security, in such a way compatible with liberal and capitalist ideas and social practices. *Birth of Biopolitics*, 22, 65, 69.

class people as aggregates and created aggregate security, a kind of thinking and a kind of security which Hard believed was beyond courts as such.

As noted earlier, reformers used statistics and statistical vocabulary to make their claims and voice their criticisms of the court-based system of injury law. Several historians have argued for the rise of a new cultural and legal mentality in the late 19th century, within which Americans came to think in new statistical and probabilistic ways, spread by the statistical efforts of both state agencies and insurance companies. While they differ in important ways, historians Barbara Welke and John Fabian Witt have both argued that there was a shift toward a statistical mentality in the law and more broadly in society over the course of the 19th and early 20th centuries. This involved a transformation in legal mentality from one of free labor and liberal individualism to one of risk and aggregates, from accidents as inevitable, individualized, and part of the cost of individual freedom to accidents as avoidable, predictable, and statisticalized. Both scholars associate statistical reasoning primarily with the administrative state.⁷⁵ The reformers discussed in this chapter called for new administrative responses to injury and spoke a statistical vocabulary. Reformers certainly made use of statistical reasoning and saw themselves as having progressed beyond the outmoded courts. For example, “I believe in statistics just as firmly as I believe in revolutions,” Crystal Eastman said in 1911. Eastman declared her commitment to both statistical reasoning and socialism, understood as a form of human

⁷⁵ *Recasting American Liberty*, 8-42 and 112-118. Witt, *Accidental Republic*, 14-17, 22-42, 138-151, 173-174 John Fabian Witt, *The Accidental Republic: Crippled Workmen, Destitute Widows, and the Remaking of American Law* (Cambridge: Harvard University Press, 2004).

progress. Furthermore, she believed in a connection between the two, adding, “what is more, I believe statistics are good stuff to start a revolution with.”⁷⁶ Injury law reformers thought statistically and biopolitically, and calling for biopolitical institutions in response to the problem of employee injury. The literature on biopolitics associates statistics and biopolitics such that it would be easy to conflate the two: reformers thought statistically and biopolitically because statistical reasoning and biopolitical reasoning are synonyms. This makes it worth pointing out that the court-based system of injury law had its statistical moment as well, as part of the law of damages. This means that the difference between courts and reformers (and the difference between courts and the administrative state), then, was not a matter of the use of statistics or not. Rather, the difference was in the ways in which these different actors used statistics. Reformers used statistics in an aggregating and biopolitical manner while courts used statistical reasoning in an individualizing manner.⁷⁷

Courts sometimes used statistics in an individualizing manner when they determined damage awards for plaintiffs who won their suits. Injured plaintiffs earned money on a daily, weekly, monthly, or yearly rate and an injury would reduce that rate of income, all of which were used to calculate damages. To use pay rates, however, courts needed to make a projection how long the injured person would have probably continued

⁷⁶ Crystal Eastman, “The Three Essentials for Accident Prevention,” *Annals of the American Academy of Political and Social Science* 38 (June, 1911): 99.

⁷⁷ Foucault distinguished biopolitics, power that is “massifying” or aggregating, and discipline, “power over the body in an individualizing mode.” *Society Must Be Defended*, 243. To use these terms, biopolitical and disciplinary power could each operate using statistical reasoning. Statistics could be used to aggregate or to individualize.

to earn an income at that rate, had he or she not been injured. How long would a person have worked, and how long would that person have lived, had he or she not been hurt? In answering such questions, courts sometimes drew upon insurance companies' statistical mortality tables and annuity calculations. These tables and calculations served as a tool for courts to make the calculation of pecuniary damages more consistent and less speculative than pain and suffering damages. In a sense, mortality tables formed a kind of abstract infrastructure or technology which courts could bring to bear on the problem of damage awards, providing a greater sense of stability and standardization to the decisions courts made about the values of injuries.

In 1873 the Georgia Supreme Court ruled on an appeal in a lawsuit brought by a railroad engineer named Richards. A jury awarded him \$3,000 for injuries after he was thrown from the train as a result of problems with the track. His employer, the Central Railroad, appealed, contesting a statement made by a witness in estimating Richards's life expectancy. The witness was a life insurance agent who said that while he was not an expert on mortality statistics, he was familiar enough with the estimates and averages in tables used by life insurance companies to speak about Richards' likely life expectancy. He included copies of mortality tables with his testimony. The Central Railroad argued in its appeal that since the man was by his own admission not an expert therefore his testimony on life expectancy should not have been allowed. Georgia Supreme Court Justice Jackson disagreed, writing in his tersely worded decision that "it appears that he was expert enough to have been employed for years about the business of life-insurance

and to know what tables were used, and we see nothing wrong in admitting the evidence.”⁷⁸ While Justice Jackson did not elaborate on his reasons for trusting the man’s judgment, it is easy to read this as a kind of faith in the truth and objectivity of statistical tables and professionals in the insurance industry, including insurance sales agents whose statistical expertise was admittedly low.

In 1891 the Pennsylvania Supreme Court heard a case brought by a Mrs. Steinbrunner, after her 46 year old husband was struck and killed by a passenger train. Her lawyer called as a witness a life-insurance agent named F.T. Lusk. Lusk's testimony became in part a lesson on the authority and construction of statistical tables. He was asked to name “what authorities are the best” on “the subject of expectation of life” to which he replied that “the actuaries of any of our life insurance companies are authority.” In response to questions from both attorneys and the trial judge, Lusk provided an account of the origins and differences between different tables used by the British and American insurance industry. Lusk ultimately said that according to two different tables, the man killed would ordinarily be expected to live an additional 23.8 or 23.81 years longer, depending on the table consulted. In the court’s decision in favor of the injured plaintiff Pennsylvania’s Chief Justice Paxson took to the *Encyclopedia Britannica* to help himself understand and explain the uses and origins of mortality tables. In doing so, he noted what he took to be an important distinction for the use of insurance industry tables

⁷⁸ *Central Railroad v. Richards*, 62 Ga. 306 (1879). On the history of expert testimony, see Jennifer L. Mnookin, “Idealizing Science and Demonizing Experts: An Intellectual History of Expert Evidence,” *Villanova Law Review*, vol. 52, no. 4 (2007): 763-802, and Barbara Young Welke, *Recasting American Liberty: Gender, Race, Law, and the Railroad Revolution, 1865-1920* (New York and Cambridge: Cambridge University Press, 2001), 163-166 and 237-240.

for damage awards. Those tables which were derived from the mortality data of the general population were useful for measuring life expectancy while tables derived solely from insured people, believed to be of above average health, were not. As with *Central Railroad v. Richards*, in *Steinbrunner v. Railway Co.* the insurance agent appeared as the bearer of statistical knowledge including knowledge of the construction of the tables themselves. That the plaintiffs' attorneys asked these agents to be witnesses attests to the sense of truth and cultural authority that went with insurance tables as well as the expertise and access to privileged information that insurance agents were perceived as having.⁷⁹

In the nineteenth century the life insurance industry used statistics to put itself on a more sound actuarial footing and, of course, to sell insurance. In doing so, the industry not only enrolled people into financial arrangements and communities that shared risk and promoted security, but also enrolled people into a new statistical worldview, within which numerical tables provided greater certainty to projections about the future. In affirming the legal salience of the working knowledge of an insurance agent, Justice Jackson also noted the legal validity of knowledge drawn from and integral to a newly emerging statistical worldview in American culture.

The use of mortality tables to help determine damages in *Central Railroad v. Richards* was not unique to the handling of workplace injury. The common law treated workplace injury as a distinct kind of injury for the purposes of liability, but once an employer had been found liable, injured plaintiffs were treated similar to any kind of

⁷⁹ *Steinbrunner v. Railway Co.*, 146 Pa. 504 (1892).

injured plaintiff. As such, it is no surprise that the U.S. Supreme Court cited *Central Railroad* along with other cases in a later decision dealing with damages. In 1886 the U.S. Supreme Court heard an appeal in another case originating in Georgia, a suit brought by a 49 year old passenger who had been thrown from a moving train as a result of a worn out section of track.⁸⁰ The plaintiff in *Vicksburg and Meridian Railroad Company v. Putnam* suffered broken ribs, collar bone, and shoulder blade, loss of sight, hearing, and difficulty both breathing and doing business. He alleged that his injuries were permanent. His physician testified hesitantly that “[t]he injuries in such cases are apt to be permanent; sometimes they grow worse, and sometimes they get well. Sometimes they get entirely well; in other cases they do not; cannot (sic) tell how it will be in the plaintiff’s case.” This medical uncertainty paired with a sense of statistical certainty with regard to the man’s life. His lawyer presented a pair of statistical tables. The “Expectation Table of Assured Lives,” assembled by the American Life Insurance Company, projected that 49 year old men were likely to live for another 21.6 years.⁸¹ The second table displayed annuities, showing the total amount of money needed to provide a person with an annual income over a period of years. The railroad objected to this material, arguing that the tables were not admissible because such tables only applied in the event of death or permanent disability, the events insured by insurance policies. The Georgia Circuit

⁸⁰ *Vicksburg and Meridian Railroad Company v. Putnam*, 118 U.S. 545 (1886).

⁸¹ While the decision did not comment on this, the assessment of life expectancy was almost certainly based on and written for white men specifically. For more on race and insurance tables, see Bouk, “The Science of Difference,” and Horan, “Actuarial Age.”

Court disagreed, allowing the tables to be admitted as evidence, and so the railroad appealed to the U.S. Supreme Court.

In explaining the pecuniary component of damage awards, the judge in *Vicksburg v. Putnam* told the jury that the injured man could be compensated for his medical costs, earnings lost due to time away from waged work, and pain and suffering. He added the jury could award for “a kind of speculative damage, in which it is ascertained what a man would make at the time of the accident and what he was capable of making afterward.” Determining this “speculative damage” involved looking at “what he did make, and then how much his capacity to do his former duties was injured; and, having ascertained that, find out how old he is; then find out how much he is damaged every year; and then find out from the table which you will have out before you an estimate of how long the man would live.” The judge added a qualification, stressing the differences between individuals and statistics, saying that

all this is not very certain. You cannot ascertain it to a certainty for several reasons. No man can tell how long a man is going to live, but you can come close to it; you can tell about how many out of ten thousand are going to die per year. You must only average it. A man who makes a good deal of money one day may get to be a drunkard, or his whole business may break down, as is often the case. His mode of life may change. (...) I say to you that the kind of damage we are now discussing cannot be sure, certain. He may be damaged more or less now, next year he may be better. This is only one mode of arriving at it. You must take the whole thing together. He may get well. The doctors tell you the chances are that things of this sort are permanent. He may get well or he may not. Try to do what is right and just between the parties. You cannot be accurate as to this kind of damage, you can only approximate.⁸²

⁸² *Vicksburg and Meridian Railroad Company v. Putnam*

The Georgia judge here noted the distinction between averages and instances, aggregates and individuals, but nevertheless encouraged the jury to use these abstract averages in measuring the dollar amount needed to compensate this particular plaintiff. What the jury ought to do, he said, was “[f]ind out what that man is capable of making. His testimony is he had a salary of \$3000 (...) Now, you take this \$3000 and what he could have made otherwise, what he has shown he did make otherwise, and find out what he did make in one year. Find out from the proof how much he has lost.” The man’s losses due to injury had lost had both non-pecuniary and pecuniary components, and an aspect of the pecuniary harm was speculative, as noted above. In dealing with that speculative component, the judge instructed the jury to

find out what he has been injured by the year. The company is bound to give him an annuity of the amount he has been damaged by the year, for a period equal to the expectation of the plaintiff's life. It would not do to say this: His expectation is thirty years, and he has lost \$1000 a year, therefore we will give him \$30,000; for the annuity will be payable one part this year and another part next year, and each of the thirty parts payable each of the thirty years. You must have a sum such that when he dies it will all be used up at the end of thirty years.⁸³

The jury awarded the man \$16,000.

The Vicksburg and Meridian Railroad appealed to the U.S. Supreme Court. The Supreme Court overturned the lower court’s award for the injured plaintiff and placed some guidelines on the use of insurance tables in damage determinations, but also re-affirmed the legality of the use of these tables. In the decision Justice Gray wrote that the use of life insurance mortality and annuity tables was established practice, citing cases including *Central Railroad v. Richards*. Gray added, however, that the lower court judge

⁸³ *Vicksburg and Meridian Railroad Company v. Putnam*

overstated the importance of the tables: “it has never been held that the rules to be derived from such tables or computations must be the absolute guides of the judgment and the conscience of the jury.” Citing an English case, *Phillips v. London & Southwestern Railway*, Justice Gray “strongly approved the usual practice of instructing the jury in general terms to award a fair and reasonable compensation, taking into consideration what the plaintiff’s income would probably have been, how long it would have lasted, and all the contingencies to which it was liable” while “strongly deprec[at]ing undertaking to bind [the jury] by precise mathematical rules in deciding a question involving so many contingencies incapable of exact estimate or proof.”⁸⁴

Gray dismissed the railroad company’s claim that the tables shouldn’t be used because the man had neither been killed nor permanently disabled, by suggesting that the question of permanent disability was an issue of fact, not law, and so up to the jury: “there was evidence from which the jury might conclude that the plaintiff’s disability was permanent.” Still, Gray wrote, the lower court judge’s instructions to the jury were unacceptable because they might “lead the jury to understand that they must accept the tables as affording the rule for the principal elements of their computation” when by law the jury was “at liberty, if they found difficulty in following the mathematical rules prescribed to them, to estimate the loss of income according to their own judgment.” Thus the instruction from the lower court judge “tended to mislead the jury (...) by giving them to understand that the tables were not merely competent evidence of the average duration of human life, and of the present value of life annuities, but furnished

⁸⁴ *Vicksburg and Meridian Railroad Company v. Putnam*

absolute rules which the law required them to apply in estimating the probable duration of the plaintiff's life, and the extent of the injury which he had suffered.”⁸⁵

Gray stressed the difference between average and individual here, saying that “[l]ife and annuity tables are framed upon the basis of the average duration of the lives of a great number of persons. But what the jury in this case had to consider was the probable duration of this plaintiff's life, and of the injury to his capacity to earn his livelihood.”⁸⁶ In marking the difference between instance and aggregate, Gray also restated the power of juries. Juries were encouraged to think statistically and to consult mortality tables, but they were not required to subordinate themselves to mathematical rules. An undercurrent here was that the decision of the jury could not be systematized: there was no justice formula. The best that the law could do was the sincere deliberation of reasonable citizens. Judges could guide juries and could make sure they acted reasonably as fact-finders and as people who made factually based decisions, and so law shaped the manner in which juries made decisions of fact, but law was still to respect the authority of the jury on issues of fact. Law, both judicial and statistical, could only encroach so far on the jury's territory.

Courts' use of mortality tables in damage determinations shows that the emerging statistical mental world and laissez-faire individualist liberalism were capable of overlapping with and re-articulating one another.⁸⁷ It would be easy to think of judges'

⁸⁵ *Vicksburg and Meridian Railroad Company v. Putnam*

⁸⁶ *Vicksburg and Meridian Railroad Company v. Putnam*

⁸⁷ My thinking on the history of liberalism in the United States are shaped by Alan Dawley, *Struggles for Justice*, Jonathan Levy *Freaks of Fortune*, and Amy Dru Stanley, *From Bondage to Contract: Wage Labor*,

emphasis on the distance between the individual plaintiff and the life insurance tables as evidence of an incomplete transition, or as unease over the coming change in world-view. Pennsylvania's Chief Justice Paxson wrote in the decision in *Steinbrunner v. Railway Co.* that mortality tables'

value, where applied to a particular case, will depend very much upon other matters, such as the state of health of the person, his habits of life, his social surroundings, and other circumstances which might be mentioned. While we are unable to see how such evidence is to be excluded, I must be allowed to express the fear that it may prove a dangerous element in this class of cases, unless the attention of juries is pointedly called to the other questions which affect it.⁸⁸

Consider these remarks by Justice Coleman, writing in a decision to the Alabama Supreme Court in 1893:

Tables of Mortality (...) are not conclusive upon the question of the duration of life, but are competent, to be weighed with other evidence. The physical condition of the injured person at the time of and next preceding the injury, his general health, his avocation in life with respect to danger, his habits and probably other facts, properly enter into the question of the probable duration of life.⁸⁹

Here as elsewhere statistical tables were allowed in courtrooms for the sake of determining damages, but they were only one kind of evidence among others for juries to use. This could be viewed as a kind of evolutionary half-step between a liberal individualist outlook to a statistical world-view, a transitional phase where judges still balked at the emerging new moral and scientific world of aggregates and probabilities. On the other hand, in calling for attention to both individuality and statistical aggregates,

Marriage and the Market in the Age of Slave Emancipation (Cambridge: Cambridge University Press, 1998.)

⁸⁸ *Steinbrunner v. Railway Co.*, 146 Pa. 504 (1892).

⁸⁹ *Mary Lee Coal Railway Co. v. Chambliss*, 11. So. 897 (1893). Cited in Conrad Reno, *A Treatise On the Law of the Employers' Liability Acts of New York, Massachusetts, Indiana, Alabama, Colorado, and England* (Indianapolis: Bowen-Merrill Company, 1903), 526.

these judges were in step with some of the most contemporary of professions and institutions engaged in the statistical transformation of American life and culture: life insurance companies.

Insurance historian Daniel Bouk writes that in evaluating applicants for life insurance, insurance company “medical director’s recommendation derived from the results of a careful physical evaluation of the applicant’s health.” These examinations spent significant time on “interviewing candidates to determine their personal and family histories” in order to understand factors including “how the applicant’s parents had lived and died,” as part of determining “whether or not the applicant had unhealthful habits, (...) if the applicant drank regularly or to excess, whether the applicant lived in a sickly or dangerous locale, and whether the applicant’s job exposed him to peculiar dangers or encouraged intemperate behavior.”⁹⁰ That is to say, in urging juries to make statistically informed yet individualized interpretive judgments, judges urged jurors to reason in a manner analogous to the ways in which life insurance companies carried out medical examinations. Attention to individual instances while thinking with life insurance tables need not be a pre-statistical holdover. After all, the measurement of individuals in detail against aggregate information was key to the life insurance industry that produced the mortality tables juries used in the first place. Rather than a difference of forward historical motion with courts being outmoded, courts and reformers – and the

⁹⁰ Daniel Bouk, “The Science of Difference: Developing Tools for Discrimination in the American Life Insurance Industry, 1830-1930” (PhD diss., Princeton University, 2009), 215.

administrative systems reformers called for – were different equally contemporary responses to the problems of their day.

The conflict over whether to deal with employee injuries via courts or an insurance-based administrative system was an in-house conflict within American liberalism, a conflict over how to best provide what historian Mary O. Furner terms “the new institutional forms of mature capitalism.”⁹¹ By the end of the first decade of the 20th century, reformers had won that conflict. Chapter two traces the shift from rhetorical calls for change to proposals for specific policies based on the aggregating and biopolitical approach to commodification of persons. These new policies met reformers’ biopolitical goals by providing all injured employees with damages without deliberation. These policies provided awards much like pecuniary damages in the court-based system, measuring injury in monetary terms derived via labor markets and insurance tables. The loss of deliberation changed the ethical grammar of the law, so to speak, such that questions of justice and the human meaning of injury had no place. The new injury policies treated families as producers of labor power, with a division of labor between waged men and unwaged women. Industrial disaster would soon provide a testing ground for these policies in action.

⁹¹ Mary O. Furner, “The Republican Tradition and the New Liberalism,” in Michael J. Lacey and Mary O. Furner, eds., *The State and Social Investigation in Britain and the United States* (New York: Cambridge University Press, 1993):171-241; 194.

Frank Wendler. February 7th, 1902.

Frank Wendler's main duty as night watchman at the power plant was to pull two copper plugs from a switchboard, in order to break the circuit between the plant and the city's electrical grid. At the end of his shift one morning Wendler grabbed the rubber handles of the two plugs and was shocked by 2100 volts of electricity. Other workers in the plant rushed to help Wendler as he screamed and writhed on the floor. Burnt skin hung on one of the plugs, the smell of charred flesh in the air. The twenty year old Wendler suffered severe burns on his hands, arms, and armpits, leading to the amputation of both arms below the elbows.⁹²

⁹² *Frank Wendler v. Red Wing Gas & Electric Company*, 92 Minn. 122 (1904)

Chapter Two. Whose Improvement? From Injury Law Reform to Workmen's Compensation Legislation

Early in the 1910s a consensus emerged that the problem of employee injury should be governed according to an insurance-based approach viewed as incompatible with courts. Injury law reformers had won. This chapter traces the turn from calls for injury law reform to actual reform, culminating in the creation of workmen's compensation legislation in numerous states in the 1910s. Policymakers sought to provide multiple forms of security through compensation laws, including financial security for business, security of labor supply, and income security for working class families. In the process of policy formulation, policymakers expressed gendered understandings of the proper social roles for men and women as well as an understanding that working class families played reproductive functions necessary for the ongoing existence of capitalism. The resulting system of injury law had little role for wage-earning women or for important elements of the human meaning of injury.

Injury law reformers called for social liberal policies, in the form of compensation legislation that would treat injuries in the aggregate and as a problem of insurance.¹ The

¹ The literature on workmen's compensation laws is vast. Two key works provide an overview of workmen's compensation across the United States; John Fabian Witt, *The Accidental Republic: Crippled Workmen, Destitute Widows, and the Remaking of American Law* (Cambridge: Harvard University Press, 2004) and Price Fishback and Shawn Kantor, *A Prelude to the Welfare State: The Origins of Workers' Compensation* (Chicago: University of Chicago Press, 2000). Various other works on compensation laws in specific states are cited throughout this chapter. In general, scholarship on workmen's compensation has tended to emphasize compensation laws as the end result of a process

Illinois Manufacturers Association, which represented about 1,000 large businesses, began calling for reform to employee injury law in 1905, and by 1909 favored compensation laws specifically.² Many other employers and the National Association of Manufacturers did the same, but this does not mean that employers had become social liberals, seeking to secure society as a whole. Rather, employers' support for compensation laws arose from concern over what they took to be potential negative results of changes in injury law, grounded in a sense that injury lawsuits were increasing.

No comprehensive study of employee injury law in the late 19th and early 20th century United States exists, nor did employers have this kind of comprehensive information. While Lawrence Friedman has argued that non-compensation characterized the court-based system of injury law in the late 19th century, early 20th century employers believed that numbers of suits were rising.³ Existing historical scholarship supports this. Historian Joseph Tripp has found that by 1910 half of all court cases in Washington state were employee injury suits.⁴ Price Fishback and Shawn Kantor found that early adoption of compensation laws correlated with high numbers of employee injury related state

of historical change, rather than as a turning point in the middle of a longer story. Two salient exceptions are Roy Lubove, *The Struggle for Social Security* (Cambridge: Harvard University Press, 1968), and David A. Moss, *When All Else Fails: Government as the Ultimate Risk Manager* (Cambridge: Harvard University Press, 2004), 216-221, both of which treat workmen's compensation as episodes in longer changes in the government management of social insecurity.

² Joseph Castrovinci, "Prelude to Welfare Capitalism: The Role of Business in the Enactment of Workmen's Compensation Legislation in Illinois, 1905-12," *Social Service Review* vol. 50, 80-102, 88.

³ See Lawrence M. Friedman, "Civil Wrongs: Personal Injury Law in the Late 19th Century," *American Bar Foundation Research Journal* vol. 12, no. 2/3 (Spring - Summer, 1987), 351-378.

⁴ Joseph Tripp, "An Instance of Labor and Business Cooperation: Workmen's Compensation in Washington State," *Labor History*, vol.17, no. 4 (1976):530-550, 537.

Supreme Court cases, and that all states saw rises in these kinds of cases.⁵ Increased employers' liability in court was a factor in the creation of compensation laws, probably because increased liability gave rise to employer and trade-association support for these laws.⁶

The table below summarizes employee injury suits heard by the Minnesota Supreme Court from 1867 through 1913.⁷ State Supreme Court cases do not indicate what was happening in lower courts, but they do provide a sense of the kind of information employers would have had, especially larger employers operating in multiple jurisdictions.

Table 1. Employers' Liability Injury Cases in Minnesota Supreme Court

Years	Employee Injury Cases	Average Injury Cases Per Year
1867-1879	11	0.8
1880-1889	82	8.2
1890-1899	182	18.2
1900-1909	322	32.2
1910-1913	164	41

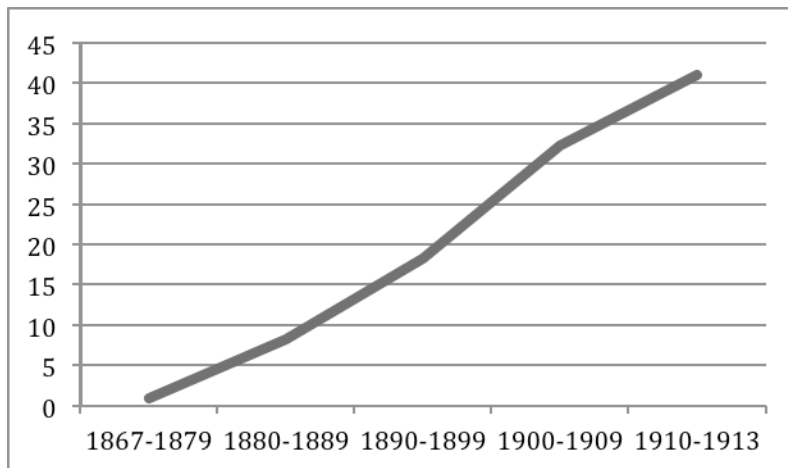
Between 1867 and 1899, the Court heard 275 appeals in injury lawsuits. From 1900 to 1913, the Court heard 487 such cases, with a rising average number of such cases per year as indicated in the third column above and the graph below.

⁵ Fishback and Kantor, *A Prelude to the Welfare State*.

⁶ See James Weinstein, "Big Business and the Origins of Workmen's Compensation," *Labor History*, vol. 8 (Spring, 1967): 156-74, and Paul Bellamy, "From court room to board room: Immigration, juries, corporations and the creation of an American proletariat: A history of workmen's compensation, 1898-1915," (PhD diss., Case Western Reserve University, 1994).

⁷ Based on my count using the *Minnesota Digest, 1851 to Date* (St. Paul, West Pub. Co., 1988)

Figure 1. Average number of injury lawsuits per year in the Minnesota Supreme Court



The period from 1900 to 1913 saw the greatest increase in such cases in the Minnesota Supreme Court, and this was the era of greatest ferment around injury law reform.

Business leaders often believed that dealing with injuries through the courts created industrial strife, because of the adversarial character of the U.S. legal system.⁸ As historian Robert Asher puts it, business leaders believed lawsuits “bred antagonism between employers and their employees,” a concern Asher places in the context of “alarm of employers, politicians, and community leaders at the growth of domestic political radicalism and labor militancy and violence.”⁹ Asher argues that this was an important factor in employer support for compensation laws. From this point of view, rising numbers of injury lawsuits would have seemed like a threat that increasing class conflict was on the horizon. Alarm over the class tensions made business and political officials

⁸ Mark Aldrich, *Safety First: Technology, Labor, and Business in the Building of American Work Safety* (Baltimore: Johns Hopkins University Press, 1997), 95.

⁹ Asher, “Business and Workers’ Welfare,” 463, 453-454. Joseph Tripp argues that the threat of political radicalism helped build business support for progressive reforms, and that those reforms in turn helped diffuse radical social movements. Joseph F. Tripp, “An Instance of Labor and Business Cooperation: Workmen’s Compensation in Washington State,” *Labor History* 17 (1976): 530-550.

“particularly receptive to programs and proposals that promised to mitigate class strife,” as Asher put it. Compensation laws appealed to employers in part because by “reduc[ing] friction and ill feeling between employers and employees” they might reduce “labor militancy and the need for unions.”¹⁰ Historian Joseph Tripp similarly argues that one of the main goals of compensation laws was “to improve labor relations.”¹¹ Tripp argues that the passages of Washington’s compensation law resulted from cooperative relationships constructed between union and business personnel, a relationship encouraged by state personnel.¹²

Business leaders like George Perkins of International Harvester and U.S. Steel similarly supported compensation laws because of the prospects of creating cooperative relationships between employers and employees.¹³ Employer-employee cooperation, Perkins argued, could be more profitable for business than conflict. In keeping with this vision, many companies implemented voluntary accident relief plans which anticipated compensation legislation. U.S. Steel’s plan was modeled on the plans required under Germany’s compensation laws.¹⁴ This notion of employer-employee cooperation was

¹⁰ Asher, “Business and Workers’ Welfare,” 454. See also Lubove, *The Struggle for Social Security 1900-1935*, 264-265.

¹¹ Tripp, “An Instance of Labor and Business Cooperation,” 531.

¹² Tripp, “An Instance of Labor and Business Cooperation,” 532.

¹³ Weinstein, *The Corporate Ideal in the Liberal State*, 45. On Perkins and more broadly on cooperation and hierarchy, see Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America* (Cambridge: Harvard University Press, 2012), 264-307. Large companies like U.S. Steel and International Harvester were able to implement voluntary compensation programs much more than with small companies due to financial resources as well as greater in-house administrative expertise.

¹⁴ Weinstein, *The Corporate Ideal in the Liberal State*, 46. For more on Germany’s compensation laws see Rodgers, *Atlantic Crossings: Social Politics in a Progressive Age* (Harvard University Press, 1998) and John M. Kleeberg, “From Strict Liability to Workers’ Compensation: The Prussian Railroad Law, the German Liability Act, and the Introduction of Bismarck’s Accident Insurance in Germany, 1838-1844,” *New York University Journal of International Law and Politics*, v36, no.1, Fall 2003, 53-132.

intended to preserve employer authority while reducing the likelihood that workers would engage in class conflict.

Concern over class conflict may explain why business supported compensation laws before the labor movement did. Until 1909 U.S. unions tended to oppose workmen's compensation laws in favor of legislation further expanding employers' liability in court.¹⁵ If the court-based system of injury law actually did breed greater conflict between employees and employers then perhaps unions' preference for courts was tied to a greater level of comfort with class conflict. In any case, the threat of union backed efforts to further expand injury liability formed an important part of employers' eventual support for compensation laws.¹⁶

Within the National Civic Federation, where business leaders and labor leaders cooperated, business leaders worked to expand support for compensation laws among

¹⁵ Lubove, *The Struggle for Social Security*, 56-57; William Forbath, *Law and the Shaping of the American Labor Movement* (Cambridge, MA: Harvard University Press, 1991), 51-52; Jennifer Klein, *For All These Rights: Business, Labor, and the Shaping of America's Public* (Princeton: Princeton University Press, 2003), 21-22. Historians have often discussed U.S. unions as being skeptical toward and preferring to resolve problems without state intervention, a trait historians call voluntarism. For a longer discussion of this historical interpretation, see chapter seven. Unions' opposition to workmen's compensation laws could be seen as union voluntarism, but it is important to note that union opposition to compensation legislation was not a rejection of state intervention in the economy as such. Rather it was a preference for economic intervention by one kind of state entity over another: unions preferred injuries to be governed by courts rather than administrative agencies. Furthermore, unions' preferences for courts over compensation legislation was tied to the active pursuit of employer' liability legislation which competed with compensation legislation. Both kinds of legislation were state intervention. Alice Kessler-Harris argues that the American Federation of Labor was voluntarist due largely to a preference for a kind of masculine collective action and to a vision of men as civically engaged citizens. Alice Kessler-Harris, *In Pursuit of Equity: Women, Men, and the Pursuit of Economic Citizenship in 20th-Century America* (Oxford: Oxford University Press, 2001), 67. It could be that the AFL's preference for a modified court-based system of injury law over workmen's compensation as an insurance-based administrative system was the result of a social vision of men as having a right to file suits in courts as part of their being men and citizens.

¹⁶ Tripp, "An Instance of Labor and Business Cooperation," 536-737.

other business owners and to change the consensus in the labor movement against compensation laws.¹⁷ The NCF was not the only factor, but the labor movement did come around, with Samuel Gompers of the AFL coming to support compensation laws by 1909.¹⁸ The debate in the NCF then shifted toward the specifics of how to achieve security of payment for injury compensation, a debate predicated on a background of agreement over the importance of compensation laws. Business leaders generally preferred private insurance while labor leaders generally preferred state insurance.¹⁹

The NCF began to craft model legislation on workmen's compensation, a contentious process.²⁰ P. Tecumseh Sherman, the chairman of the NCF's model legislation committee and a self-described conservative on the question of workmen's compensation, argued that compensation laws should be elective except in especially hazardous industries. U.S. Steel attorney Raynal Bolling believed compensation laws should be compulsory and should include all employees, including domestic and agricultural workers. Hugh Mercer of the Minnesota Employees' Compensation Commission argued against both, calling for higher compensation rates and state insurance.²¹ Ultimately the NCF backed Sherman's vision and began to send copies of the resulting suggested legislation to state politicians around the country.²²

¹⁷ Weinstein, *The Corporate Ideal in the Liberal State*, 48.

¹⁸ Weinstein, *The Corporate Ideal in the Liberal State*, 50.

¹⁹ Weinstein, *The Corporate Ideal in the Liberal State*, 51. The preference for state monopoly insurance does not fit with the characterization of unions as voluntarists. See note 15, above.

²⁰ Weinstein, *The Corporate Ideal in the Liberal State*, 51.

²¹ Weinstein, *The Corporate Ideal in the Liberal State*, 53.

²² Weinstein, *The Corporate Ideal in the Liberal State*, 55.

The National Civic Federation, like government commission structures more broadly, drew on three main constituencies, and sought to modulate those constituencies' relationships to each other; it was made up of what Alan Dawley has called "a tripartite structure of capital, labor, and the public that would bargain as corporate entities to resolve their differences peaceably within the overarching solidarity of the nation." Social liberal organizations like the NCF proposed to "ride herd on social forces, so that America's destiny (...) would be in the hands of social organizations that were conscious and purposive expressions of human will."²³ The need for someone to 'ride herd' in this way arose from a sense of crisis or potential catastrophe. As President Theodore Roosevelt explained his involvement in resolving the 1902 anthracite coal strike which saw bitter conflict between mine owners and miners affiliated with the United Mine Workers, "I was anxious to save the great coal operators and all of the class of big

²³ Alan Dawley, *Struggles for Justice: Social Responsibility and the Liberal State* (Cambridge: Harvard University Press, 1991), 114. Economist Robert Boyer has argued that capitalist societies always involve "the combination of modes of production organization and of labor reproduction." Robert Boyer, *The Regulation School: A Critical Introduction* (New York: Columbia University Press, 1990), xv-xvi. From a social liberal perspective, the point of compensation laws was largely to secure labor reproduction by shoring up working class families whose incomes were threatened by injuries to male. In *Struggles for Justice*, Alan Dawley argues that dramatic changes in social reproduction as a result of economic change characterized the late 19th and early 20th century. The need to adapt to these changed conditions in order to bring about a greater degree of social stability characterized government action in this era generally. For other works on the relationship between law and social reproduction, see Bianca Premo, *Children of the Father King: Youth, Authority, and Legal Minority in Colonial Lima* (Chapel Hill: University of North Carolina Press, 2005); Amy Dru Stanley, *From Bondage to Contract: Wage Labor, Marriage, and the Market in the Age of Slave Emancipation* (Cambridge: Cambridge University Press, 1998); Kathleen Canning, *Gender History in Practice: Historical Perspectives on Bodies, Class, and Citizenship* (New York: Cornell, 1996); Jeanne Boydston, *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic* (New York: Oxford University Press 1990); Christopher Tomlins, *Freedom Bound: Law, Labor, and Civic Identity in Colonizing English America, 1580-1865*. Cambridge: Cambridge University Press, 2010. See also Michel Aglietta, "Capitalism at the Turn of the Century: Regulation Theory and the Challenge of Social Change," *New Left Review* no. 232 (1998): 41-90.

propertied men, of which they were members, from the dreadful punishment which their own folly would have brought on them if I had not acted.”²⁴

Alan Dawley has argued that big businesses understood that policymakers in this era were increasingly turning away from “laissez-faire” visions of capitalism. Thus, businesses sought to self-regulate in order to avoid state regulations under which they would have less self-control. He cites the creation of the National Industrial Conference Board as an attempt at this kind of attempt at corporate self-regulation.²⁵ The NICB, which would soon house the Conference Board of Physicians in Industry, was “an ideological clearinghouse and publicity bureau for industrial corporations,” in Dawley’s words. The Conference Board put forward proposals for corporate best practices that could help businesses with financial decisions and also with using cooperative approaches to employment in order to maintain managerial control.²⁶ Dawley raises an important point but larger businesses had already begun to regulate themselves and to reduce their reliance on markets as institutions for governing constrained business, as seen in the merger waves of the late 19th century. Prior to this merger wave, businesses

²⁴ Dawley, *Struggles for Justice*, 134. This sensibility characterizes one tendency within efforts to regulate employment from the late 19th century through the second world war. Employment is a relationship; regulating employment means governing multiple actors in that relationship – employers, employees, and in the case of compensation laws, working class families. For much of the 19th century legal regulation of employment centered on regulating employees and unions. Toward the end of the 19th century and over the early 20th century, government came increasingly to regulate employers, driven in part by the view that without governing both sides, class conflict would become heated and ultimately harmful to capitalism. See Christopher Tomlins, *The State and the Unions: Labor Relations, Law, and the Organized Labor Movement in America, 1880-1960* (Cambridge: Cambridge University Press, 1985) 89, 99-247. See also Richard Greenwald’s analysis of the involvement of Robert Wagner and Frances Perkins in industrial relations policy in New York in the 1910s prior to their role in shaping federal policy in the 1930s. Greenwald. *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era New York*. See also Dawley, *Struggles for Justice*, 154-155.

²⁵ Dawley, *Struggles for Justice*, 157-158.

²⁶ Dawley, *Struggles for Justice*, 158.

had experimented with pools, associations, and agreements, forms regulation themselves and the broader economy. These amounted to a step away from laissez-faire.²⁷ The important change with business attitudes to compensation laws, then, was not the rise of efforts to manage – to ‘ride herd’ on – social conflict, as Dawley put it, but rather a growing consensus that state actors in particular should be the ones to do this herding.²⁸

Another reason employers and their organizations began to support workmen’s compensation laws was financial. Employers hoped to avoid greater liberalization of liability in lawsuits, which was both costly and unpredictable, and that they might remove an important point of contention that fed class conflict and unionization.²⁹ Employers, or rather the politically active representatives of employers and their associations, preferred compensation laws that operated according to insurance principles, with injury costs fixed and spelled out clearly, and with these costs paid for by mechanisms for which employers could budget.³⁰ The table below summarizes the outcomes of injury suits in the Minnesota Supreme Court for the years 1900-1913.

²⁷ See Levy, *Freaks of Fortune* 264-307.

²⁸ On this point, see Richard Greenwald’s *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era New York*. Greenwald narrates a shift from non-state regulation of employment to state regulation of employment, with substantial continuities in the goals, methods, and outlook on the part of the regulators.

²⁹ Moss, *When All Else Fails*, 247.

³⁰ In general, when formulating compensation laws, reformers and policymakers looked abroad. The preference for insurance over courts was in part a preference for the German over the British system as the model of choice for U.S. injury law reform. The British system included similar provisions but included the right to sue, such that employees could still take their chances in court, leading to uncertainty for employers. The German system made employees’ injuries into fixed costs which were pooled through policy changes. See Moss, *When All Else Fails*, 221-223, 248. Daniel Rodgers has argued that German government officials worried in part that social conflict derived from working class insecurity fed the rise of socialism. If provided security, the political rationale went, workers would have less reason to oppose the prevailing social and political order. See Rodgers, *Atlantic Crossings*. John Kleeberg’s account of German workmen’s compensation argues that business played a greater role in these laws and de-

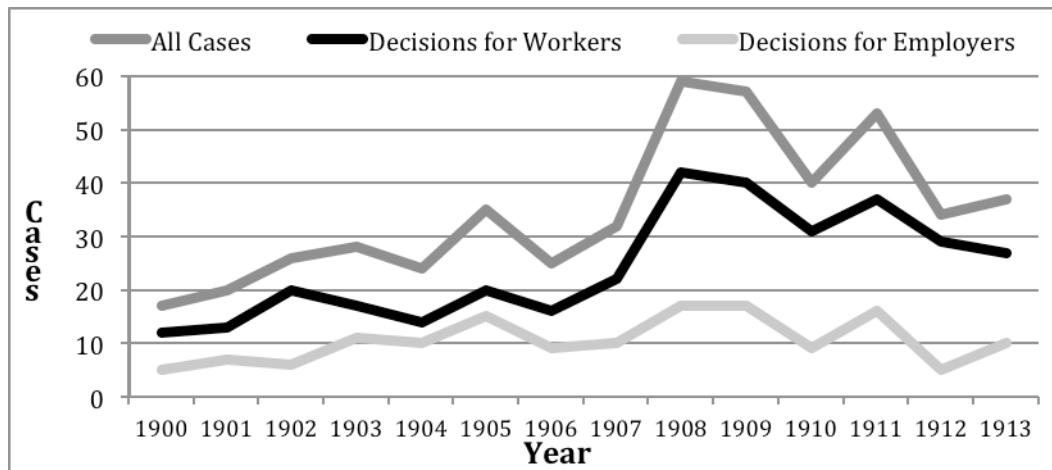
Table 2. Employers' Liability Case Outcomes in Minnesota Supreme Court, 1900-1913

Year	Injury Suits	Decisions for employee	Percent of cases with decision for employee	Appeal brought by employer	Decisions for appellant employer	Employers' success rate in appeals
1900	17	12	71	16	4	25%
1901	20	13	65	16	5	31%
1902	26	20	77	21	3	14%
1903	28	17	61	18	5	28%
1904	24	14	58	15	2	13%
1905	35	20	57	22	9	41%
1906	25	16	64	21	6	29%
1907	32	22	69	23	5	22%
1908	59	42	71	44	4	9%
1909	57	40	70	46	9	20%
1910	40	31	78	26	4	15%
1911	53	37	70	39	6	15%
1912	34	29	85	29	3	10%
1913	37	27	73	33	6	18%
Total	487	340	70	369	71	19%

In every year from 1900 through 1913 the Minnesota Supreme Court was more likely to find in favor of an employee than an employer in an injury suit. On average, employees had two in three chance of winning their appeal. The vast majority of suits were brought as appeals by employers, and yet employers' chances of winning their suits was quite low – on average, employers had less than a one in five chance of winning. Liability for employers was generally high, somewhat increasing, and relatively unpredictable.

emphasizes the role of state personnel. On Kleeberg's account, the German story was more like what occurred in the United States: politically active and fixed-capital intensive businesses sought to control costs in the face of expanding liability and so promoted an insurance based system for handling the financial costs of wage-earners' injuries. John M. Kleeberg, "From Strict Liability to Workers' Compensation."

Figure 2. Decisions for Workers and for Employers in Minnesota Cases



Employers believed that their legal situation was deteriorating with regard to employee injury suits and they seem to have been right. The numbers of employee injury lawsuits rose in this period and the win/loss rates were not particularly favorable to employers. Given these conditions – poor odds of winning and increasing numbers of suits per year – it is not surprising that employers criticized the court system and saw it as a source of insecurity. Furthermore, the rises and falls, tied to the individualized character of court proceedings, made the court system unpredictable for employers.

Even if employees lost their suits, the courts were still a source of uncertainty. Historian Joseph Tripp argues that employees were successful in only ten percent of injury suits in Washington state in 1910. Still, insurance costs in this era rose in Washington, indicating a higher cost for the management of uncertainty. Between 1905 and 1910, employers' liability insurance rates in Washington roles from \$0.45 for \$100 of payroll to \$1.50.³¹ Insurance mitigated employers' risks, but did not eliminate them,

³¹ Tripp, "An Instance of Labor and Business Cooperation," 537.

because rising injury costs would translate into higher insurance premiums. This rise in costs was more slowly paced and more predictable but still a source of uncertainty. In 1887 employers' liability insurance companies collected just over two hundred thousand dollars in premiums across the United States, over five million dollars in 2013 dollars. By 1908, as employers' liability had become increasingly uncertain from an employers' perspective, employers' liability insurance premiums had grown to twenty-eight million dollars per year, over seven hundred million dollars in 2013 dollars.³² This increase in employers' liability insurance reflects both rising costs charged to employers by insurers, and increased employer concern with the uncertainties posed by potential injury liability lawsuits. By 1912 employers' liability insurance premiums in the United States had risen to thirty-five million dollars, almost eight hundred thirty million dollars in 2013 dollars.³³

Insurance provided a mechanism to restore certainty to employers as well as a vocabulary: employers could conceptualize their potential costs for injuries in terms of risks. By the end of 1910 employer organizations such as the National Association of Manufacturers and the National Metal Trades Association supported the proposals put forward by injury law reformers, which called for writing insurance methods into injury policy, thus removing courts from the equation: workmen's compensation laws.³⁴

Compensation laws would provide businesses with security by replacing courts, with

³² Moss, *When All Else Fails*, 164. Inflation adjustment calculated via inflation calculator at <http://www.westegg.com/inflation/>, accessed April 1st, 2013.

³³ Roy Lubove, *The Struggle for Social Security 1900-1935* (Cambridge, Harvard University Press, 1968), 261.

³⁴ Mark Aldrich, *Safety First: Technology, Labor, and Business in the Building of American Work Safety* (Baltimore: Johns Hopkins University Press, 1997), 94. On the National Association of Manufacturers' response to compensation laws, see Weinstein, *The Corporate Ideal in the Liberal State*, 47.

their variable awards, with insurance tables making employees' injury costs calculable in advance and thus a cost for which companies could budget.

Business support for compensation laws was thus predicated largely on businesses' own desire for security within markets, rather than the security of markets and biopolitical outlook held by policy reformers. Businesses' drive for security differed from the policy reformers' concerns over social reproduction. Injury law reformers sought to financially secure working class families in the aftermath of employee accidents and to secure labor market reproduction. Businesses sought to have the best outcomes in markets, rather than securing markets themselves. Businesses sought relative security within the market, while reformers sought security of the labor market, so to speak. By 1910, for many businesses and associations, due to the changes in liability within the court-based system of injury law, security within the market meant support workmen's compensation. Compensation laws involved limiting the power of courts to further erode employers' legal defenses, aided in part by employers' liability legislation, which would provide a much more predictable environment for businesses' operations.³⁵ By the early 1910s, workmen's compensation emerged as the primary business-supported policy proposal for the accident problem.³⁶ For example, in that year the National Association of Manufacturers surveyed 25,000 employers and found that ninety-five percent supported compensation for employees' injuries via insurance methods, but many

³⁵ James Weinstein, *The Corporate Ideal in the Liberal State, 1900-1918* (Boston: Beacon Press, 1968), 45. For a discussion of the alternatives to workmen's compensation, see Witt, *The Accidental Republic*.

³⁶ Price V. Fishback and Shawn Everett Kantor, *A Prelude to the Welfare State: The Origins of Workers' Compensation* (Chicago, University of Chicago Press 2000), 93-102.

felt they could not afford to set up such policies on their own.³⁷ This may have been an attempt to shape regulation in order to avoid state regulation that was less subject to employers' shaping role. It was likely also an attempt to organize industry via legislation, to get most businesses operating similarly and so to mitigate downward pressures on safety as a result of competition, pressures which, in a time of expanding legal liability, would have meant upward pressures on liability costs.³⁸

Reformers who favored workmen's compensation laws made arguments that borrowed from insurance perspectives, arguing that compensation laws could create greater financial security for wage earners and their families. Furthermore, many argued, if accident costs were paid for by employers, employers would face incentives to provide greater safety. If danger produced injuries, the argument went, then injuries should be made into costs to employers, so that employers would have economic reasons to reduce workplace danger.³⁹ Employers' liability insurance companies themselves generally favored workmen's compensation laws as well. Insurers preferred these laws over employers' liability reforms that kept courts as the main institutions for handling lawsuits, because courts made it difficult to calculate predictable insurance rates as a result of the wide variation in courts' behavior.⁴⁰

³⁷ Weinstein, *The Corporate Ideal in the Liberal State*, 47.

³⁸ Historian James Livingston has argued that financial policy in the turn of the twentieth century is best understood as part of a process of class formation among U.S. capitalists. Employer support for compensation laws can be seen in a similar light. See Livingston, *Origins of the Federal Reserve System, 1890-1913*.

³⁹ Moss, *When All Else Fails*, 165.

⁴⁰ Joseph L. Castrovinci, "Prelude to Welfare Capitalism: The Role of Business in the Enactment of Workmen's Compensation Legislation in Illinois, 1905-12," *Social Service Review* Vol. 50, No. 1 (Mar., 1976), 80-102, 89. Unsurprisingly, insurers did not support compensation measures that would replace

Political consensus in favor of compensation laws grew with employers' and insurers' support. The people who formulated compensation laws in their specifics tended to focus on aggregates and reproductive institutions. As the public and policy conversation shifted from calls for compensation laws to actually writing such laws, family and gender came increasingly to the forefront. Achieving the biopolitical goals of injury law reform meant treating families and wages as reproductive institutions. Employee injuries disrupted income, a disruption that threatened households reliant on waged income, and made it harder for households to play their reproductive roles in capitalism. The role of money and policy in this reproduction was thoroughly gendered. A concern over and theorizing of the relationship between waged work and family animated some writings by late 19th and early 20th century economists. These writers understood families as important for the reproduction of the economy and income as important for the reproduction of families. This writing formed part of the broader intellectual and cultural context within which injury law reform occurred as well as clarifying some of the issues involved in the relationship between family and economy, issues to which compensation laws responded. "Work is to the workman that which is necessary for the maintenance of himself and of his family," wrote Matteo Liberatore in *Principles of Political Economy* in 1889. Since work provided wages used to purchase the necessities of life, loss of access to income could disrupt families' "maintenance."

private insurers with public insurance plans. See for example Robert Asher, "Radicalism and Reform: State Insurance of Workmen's Compensation in Minnesota, 1910-1933," *Labor History*, No. 14. (1973), 19-41; and Lubove, *The Struggle for Social Security 1900-1935*, 261.

Liberatore began *Principles of Political Economy* with an exercise in word origins which linked economy with family: “Economy is a Greek word, from *oikos*, house, and *nomos*, distribution; and according to this etymology it was at first used to signify domestic administration. (...) From the family this word was afterwards extended to the city or State (in Greek *polis*), as referring to the property of a whole people, under the name of social or public wealth.”⁴¹ Liberatore did not point out that the Greek *nomos* also has overtones of law and authority as well.⁴² From early on economy, family, and law were interwoven etymologically and in social practice.

In defining political economy as “the science of public wealth,” Liberatore equivocated on the role of family. He noted that “public wealth” was distinct “from private economy, which belongs to the private person or the family.”⁴³ Thus the family was outside of political economy. And yet, he wrote, “the concrete man either is the father of a family or belongs to a family; and as such he should be considered.”⁴⁴ Thus to think about actual persons, political economy had to consider the family. Some other late 19th and early 20th century economists recognized the importance of the family to the

⁴¹ Matteo Liberatore, *Principles of Political Economy* (New York: Benziger and Co., 1891), i. Liberatore’s book was written in 1889 but published in English in 1891. I have found Christopher Tomlins’s discussion of *oikos* in early America thought provoking. *Freedom Bound: Law, Labor, and Civic Identity in Colonizing English America, 1580-1865* (New York: Cambridge University Press, 2010), 376-400.

⁴² Classics scholars Stephen Todd and Paul Millett refer to the “meeting of law, society and politics in the idea of *nomos*.” Todd and Millett, “Law, Society, and Athens,” in Paul Cartledge, Paul Millett, and Stephen Todd, eds., *Nomos: Essays in Athenian Law, Politics and Society* (Cambridge: Cambridge University Press, 1990), 1-19; 12.

⁴³ Liberatore, *Principles of Political Economy*, xvii.

⁴⁴ Liberatore, *Principles of Political Economy*, 290.

capitalist economy as well. As Richard Ely put it, “The Family is to be kept in view as the true social unit in all economic discussion.”⁴⁵

Often, “the family” meant “women,” and specifically in the roles of wives and mothers. As Alfred Marshall put it, “[t]he most valuable of all capital is that invested in human beings; and of that capital the most precious part is the result of the care and influence of the mother (...) in estimating the cost of production of efficient labour, we must often take as our unit the family.”⁴⁶ Walter Bagehot wrote in his 1888 *Economic Studies* that “a good mother of a family causes more wealth than half the men, for she trains the beginning boys to be fit for the world, and to make wealth; and if she fails at that beginning the boys will be worse gold finders all their lives.”⁴⁷ Families produced future wage earners and future unwaged mothers, and both were required for the continuation of the economy.

Families required incomes in order to play their role in reproducing society and economy. William Jevons wrote that “[e]conomists have supposed that there must be some amount of wages which is the least that a working man can live upon and rear a family so as to maintain the support of labour.”⁴⁸ Liberator put the point similarly, laying down “a rule that the natural price of a man’s labour is the price which, inclusive of the wife’s earnings (...) will suffice to maintain him and her and two or three little children.” If wage-earners received income below this ‘natural price’ “they will not

⁴⁵ Richard Theodore Ely, *An Introduction to Political Economy* (New York: Hunt & Eaton, 1893), 261.

⁴⁶ Alfred Marshall, *Principles of Economics, Volume I* (London: MacMillan and Co., Limited, 1898), 647.

⁴⁷ Walter Bagehot, *Economic Studies* (London: Longman, Green and Co., 1888), 173.

⁴⁸ William Stanley Jevons, *The Principles of Economics: A Fragment of a Treatise on the Industrial Mechanism of Society* (London: MacMillan and Co., Limited, 1905), 233.

answer the intentions of nature.”⁴⁹ That is to say, below a certain income threshold, families became less able to serve a role in the maintenance of working class families and the having and raising of children. If the economy did not provide families with sufficient income, the unnatural and unjust result would be social disorder.

In 1916 jurist Roscoe Pound argued for the importance of family as well, writing that the “individual interests of the wife and of the dependent child (...) come to be emphasized through recognition of the social interest in the moral and social life of the individual, which calls especially for legal securing of a human life to those who are dependent.”⁵⁰ Pound described “a certain social interest in the maintenance of the family as a social institution and on the other hand a social interest in the protection of dependent persons, in securing to all individuals a moral and social life and in the rearing and training of sound and well-bred citizens for the future.”⁵¹ With compensation laws, policymakers wrote these social interests into legislation.

Economists and jurists theorized the role of family, and especially of feminized unwaged labor, in reproducing labor power. They also reflected on the need to govern capitalist society from a social viewpoint in order to manage the negative effects of economic life on the family as an institution of reproduction necessary for capitalist society to exist. Reformers and policymakers dealt with this same problem from a less

⁴⁹ Liberatore, *Principles of Political Economy*, 181.

⁵⁰ Roscoe Pound, *Individual Interests in the Domestic Relations*, *Michigan Law Review*, vol. 14, no. 3 (January 1916), 177-196, 181.

⁵¹ Pound, *Individual Interests in the Domestic Relations*, *Michigan Law Review*, vol. 14, no. 3 (January 1916), 177-196, 183.

theoretical perspective as they sought to craft new ways to govern the problem of employee injury.

Several states formed commissions to study the problem of employee injury compensation in the early 20th century, often as a result of calls for legislative change by private actors. For example, business officials in Minnesota formed the Minnesota Employers' Association in 1908, largely in response to the threat of the expansion of employers' liability. This association, in turn, played a key role in getting a bill passed in 1909 establishing an official state commission to study the accident problem and propose legislation.⁵² The reports of state commissions added to the growing mountain of evidence that there was a serious problem of injury and injury compensation, and their reports often included calls for compensation laws.⁵³

In July of 1909 the Minnesota Employees' Compensation Commission organized a national conference held in Atlantic City, attended by twenty-four people. This conference was crucial to the process of creating compensation laws around the country. The conference helped connect reformers and policymakers in multiple states, making the creation of compensation laws a decentralized but still a single national process of policy

⁵² Accident and liability commissions shared the same tripartite structure common in commissions of this era, with a representative of business, labor, and the public, represented by an attorney. Fishback and Kantor, *A Prelude to the Welfare State*, 132. The point of these commissions was to harmonize conflicting interests through representation, in service of society as a whole. The same goal and structure characterized collective-bargaining oriented commissions, whether conducted under the auspices of private actors like the National Civic Federation or through public bodies. See Greenwald, *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era*. After the creation of workmen's compensation laws, injury law came to center on administrative agencies, abandoning the tri-partite representative structure of commissions. The same occurred in collective bargaining in the 1930s, suggesting a general turn toward administration in both employment and labor law.

⁵³ Mark Aldrich, *Safety First*, 93.

formation. Conference attendees displayed many of the animating concerns informing compensation laws and expressed social liberal perspectives, seeking state legislation to secure aggregated social entities like labor markets. In the opening discussion, Miles Dawson presented two perspectives from which to consider compensation legislation. Dawson was an actuary and an attorney active in the American Association for Labor Legislation who later in 1909 would volunteer his legal services to the International Ladies Garment Workers Union during the garment workers' strikes.⁵⁴ Dawson distinguished "the standpoint of the interests of the workingmen themselves, and their families" from "a general economic standpoint, which includes the employers' position."⁵⁵ Dawson argued that state policy should be informed by this general economic perspective: government should provide for the health of the economy as a whole in a way that individual economic actors could not. In Dawson's view this required a change in governance, away from the court-based system of handling employee injuries. That system was wasteful, he argued, and ought to be replaced with a system treating injuries

⁵⁴ The conference proceedings do not list the institutional affiliation of three of the attendees. Ten were members of state committees and agencies studying the accident problem in different parts of the country. Eleven worked for insurance companies. Here and elsewhere, insurance company personnel, insurance as a metaphor, and insurance-derived terms and concepts shaped the public and policy discussion of the problem of employee injury and its possible solutions. See David A. Moss, *Socializing Security*, 80, and Laura Bufano Edge, *We Stand As One: The International Ladies Garment Workers' Strike, New York 1909* (Minneapolis: Twenty First Century Books, 2011), 77.

⁵⁵ *Report of Atlantic City Conference on Workmen's Compensation Acts, July 1909* (n.p., n.d.), 13. I found this report in a bound volume entitled *Workmen's Compensation* assembled by Hugh V. Mercer of the Minnesota Employees' Compensation Commission. Mercer donated this collection to the University of Minnesota Law Library in 1938. In his dedication in the book's front cover Mercer wrote that this collection contained one of two copies of the Commission's report. Mercer credited Pierce Butler, President of the Minnesota State Bar Association, and Minnesota Law School Dean William S. Pattee for convincing him to become involved in the effort to create workmen's compensation law. The item is held in the University of Minnesota Law Library's general circulation, call number KF3615.M47x 1910.

as “a purely business matter” and which cut out expensive legal proceedings.⁵⁶ He praised employers’ liability insurance companies for pursuing legal settlements between employers and injured employees rather than litigation, taking this as a positive example of how to handle accident claims.⁵⁷ Part of the source of waste in the law, Dawson argued, was that “a sharp lawyer” knew how to evoke “a great deal of sympathy on the part of the jury by exhibiting the widow and minor children, aiming to get a large verdict.”⁵⁸ In Dawson’s view removing this narrative and rhetorical component of the law, and the power of the jury, would result in a much less wasteful system for handling workplace injuries.

Dawson particularly singled out “the ambulance chaser” as a source of economic waste, suggesting that these attorneys preyed upon helpless workers and bereaved families.⁵⁹ Several conference attendees challenged Dawson on this point. George Gillette, of the Minnesota commission, argued that lawyers were often “[t]he only friend” of injured workers and their families.⁶⁰ Charles Neill, U.S. Commissioner of Labor, told a story about a friend of his who worked as an attorney in New York and who took on personal injury cases “as a matter of sentiment.” This unnamed attorney had taken an injury suit for a fee of half the verdict, and expended over three thousand dollars in pursuing the case. When the court awarded the plaintiff six thousand dollars, the attorney found the case a net loss. For Neill, the problem of “the ambulance chaser” was not

⁵⁶ *Report of Atlantic City Conference*, 16.

⁵⁷ *Report of Atlantic City Conference*, 18.

⁵⁸ *Report of Atlantic City Conference*, 26.

⁵⁹ *Report of Atlantic City Conference*, 16.

⁶⁰ *Report of Atlantic City Conference*, 266.

individual greed by unscrupulous lawyers, but was further reason to remove injuries from courts.⁶¹ John Blaine, an attorney who served on the Wisconsin Industrial Commission, argued similarly that while he was not an injury lawyer, in his experience “a majority of attorneys who take these negligence cases are men of high standing in their profession and as citizens in their respective communities.”⁶² Rather than attack lawyers who represented the injured, Blaine argued, Dawson should criticize insurance agents who pressured grieving families and injured workers to accept low settlements that they never would accept if they “had time to consult a reputable attorney.”

In discussing the best institutions for governing the problem of employee injuries, conference attendees displayed awareness of the need to balance multiple interests. Working class people had one set of interests, businesses had another, and government was to harmonize or balance those interests. Part of the problem which made legislation needed, from the perspective of the people formulating compensation laws, was that both employers and working class families tended to be interested in their individual needs, rather than attending to the more general social perspective. What needed attention were larger social processes and reproductive and biopolitical concerns. John Blaine argued that much of the talk of avoiding waste was fundamentally about helping employers reduce their share of costs, “a waste saved to the employer and not to the employee.” This kind of savings did not address the problem of accidents depriving families of “the benefit of [men’s] employment.” That loss in turn helped push working class children out

⁶¹ *Report of Atlantic City Conference*, 36.

⁶² *Report of Atlantic City Conference*, 38.

of schools and so out of their chance for “social betterment.”⁶³ This social loss, Blaine suggested, was encouraged by insurance companies and settlements. The problem as Blaine posed it was that market actors sought to maximize how they fared in immediate interactions or transactions, which did not necessarily reproduce the conditions of economic life in the best way. The so-called invisible hand of the market did not really work, and the end result, without intervention, would ultimately be bad for businesses. Blaine added: “within ten years, if we do not succeed in getting a compensation act (...) in all the industrial lines [we] will do away entirely” with the system of employers legal defenses “because the public is drifting that way very rapidly.”⁶⁴ As such, “the employer (...) must look ahead to more liberalized laws on the question” of injury liability.⁶⁵ Employers would pay more, Blaine argued. The only open questions were when this would become the case, and what the institutional particulars were. Employers thus had interested in the question of how to best systematize payments for employees’ injuries.

Lee Frankel, an official at the Metropolitan Life Insurance Company commended Blaine’s speech and expanded on Blaine’s points. Frankel began by expounding what he took to be a new social understanding of poverty that should inform policy. While “the conception in the English poor law [was] that a man who becomes impoverished is responsible for his condition,” recent social science research had found the opposite:

⁶³ *Report of Atlantic City Conference*, 39.

⁶⁴ *Report of Atlantic City Conference*, 40.

⁶⁵ *Report of Atlantic City Conference*, 41.

“[t]he poor are not responsible for their condition.”⁶⁶ Rather, recent studies of poverty had found that “[t]he large bulk of pauperism is primarily due to the bad environment of the individual, and is a result in part of our so-called employers’ liability legislation.” When “[t]he father or the mother or the brother is killed or become incapacitated,” Frankel elaborated, “the family, which has been self-sustaining and respectable, has to go to the wall perforce, because no provision is at present made by our legislation for its care, maintenance and support. (...) And we have the resulting condition that the family goes to pieces, falls by the wayside, becomes dependent on the public purse simply because in this horrible crush to get ahead, in this desire to make profits, the individual laborer (...) suffers the loss and bears the entire responsibility.”⁶⁷ Frankel added that “we are no longer in an industrial age” and so the United States needed a new perspective, a “social viewpoint.” For Frankel this social viewpoint meant government should intervene within the workings of business, in order to help prop up the reproduction of families and, in doing so, the reproduction of society. Wallace Ingalls of the Wisconsin Industrial Commission noted that the instantiation of what had Frankel called a “social viewpoint” via workmen’s compensation was quite different from the old individualist perspective that had informed the court-based system of injury law. The social viewpoint, Ingalls said, represented “a move to revolutionize a [legal] system which has existed for over a century.” This legal revolution involved “a destruction of the will of the individual, in a

⁶⁶ *Report of Atlantic City Conference*, 45. For more on Frankel, see Nikki Mandell *The Corporation As Family: The Gendering of Corporate Welfare, 1890 to 1930* (Chapel Hill: University of North Carolina Press, 2002), 12.

⁶⁷ *Report of Atlantic City Conference*, 47.

sense” and as such would face serious legal challenges from ideologically laissez-faire or individualist liberals who opposed the new social liberalism.⁶⁸

Echoing Frankel’s emphasis on society as a whole, Hugh Mercer from the Minnesota commission argued about the legal basis for compensation laws in a compressed account of U.S. intellectual and commercial history. Mercer argued that early in U.S. History “[t]he best thought of the best minds of this new and ambitious country was devoted to the essential features of both private and public law” and questions of government more generally.⁶⁹ After the Civil War, “the great minds in America” had turned to matters of business and industry; the success of those great minds had transformed the American economy. Economic expansion and industrialization brought new risks into American’s lives, and new risk management mechanisms such as life insurance, fire insurance, and agricultural securities exchanges. American institutions had not, however, kept pace with the new risks of industrial accidents.⁷⁰ Mercer suggested that he and his fellow commission members were the latest actors at the end of this series of transformations. What they needed to was filling a gap in American risk management institutions: “This is a risk; it really is an insurance problem and as such must be

⁶⁸ *Report of Atlantic City Conference*, 288.

⁶⁹ *Report of Atlantic City Conference*, 158.

⁷⁰ *Report of Atlantic City Conference*, 162-163. On the history of the police power in the United States, see William J. Novak. *The People's Welfare: Law and Regulation in Nineteenth-Century America* (Chapel Hill: University of North Carolina Press, 1996); William J. Novak, “The Myth of the 'Weak' American State,” *American Historical Review* vol. 113, no.3 (June, 2008): 752-772 ; Christopher Tomlins, “Necessities of State: Police, Sovereignty, and the Constitution,” *Journal of Policy History* vol. 20, no. 1 (January, 2008): 47-63.

treated.”⁷¹ Mercer’s remark shows once again the centrality of insurance to the new system of governing injury.

Mercer appealed in particular to the history of fire insurance regulation. The state had both an interest and the legal right, based in the police power, to intervene to regulate fire insurance, as well as industrial accident insurance. The state had “the power to protect the public interests in all controversies between individuals.” This power was “a condition precedent to all contracts” and “a safety valve for all action.” “[A]ll property is held subject to [this] power of reasonable regulation and control.”⁷² Given the social effects of high rates of injuries and low rates of compensation, there was a clear public interest in state intervention on the question of industrial accident compensation: “provision for mechanics and artisans and protection for their employers is (...) necessary to the people and (...) an obligation of the state.”⁷³

After Mercer’s remarks, conference attendees repeatedly returned to the theme of economics. Implicit within many proposals at the conference were ideas about the relationship between economic life and social reproduction, and about the role of economic rationality. Conference attendees generally agreed that ‘economic’ meant a relatively narrow emphasis on cost allocation but they disagreed about the appropriateness of this perspective in addressing the problem of workplace injuries. For example, George Gillette of the Minnesota liability commission said that compensation laws must be “approached both from the standpoint of the employer and the employee,

⁷¹ *Report of Atlantic City Conference*, 195.

⁷² *Report of Atlantic City Conference*, 206.

⁷³ *Report of Atlantic City Conference*, 211.

with a spirit of compromising and doing that which will accomplish the greatest good.” In doing so, Gillette added, to “approach this subject entirely (...) from the economic standpoint alone” would be to “make a very great mistake.”⁷⁴ This disagreement over economic rationality would not be soon resolved.⁷⁵ For Gillette, the problem of injury was a political problem to be navigated in light of the greater good. Conference attendees implicitly disagreed over the meaning of what Dawson had called “a general economic standpoint” as distinct from “the interests of the workingmen (...) and their families.” Fred Gray, an insurance company official, argued that “endeavor as we may to keep before us [the] human aspects” of the problem of workplace injury, “the whole problem is necessarily an economic one and in its final analysis we must count the cost.”⁷⁶ For Gray, the state had to think economically, but it had to also think socially. Gray, like many others involved in injury law reform, thus represented social liberalism. The state was to think economically but it should do so in a way that constituted and maintained the economy itself, which was different from the way that actors in the economy thought. The state should serve the economy’s interest when market actors could not adequately do so.⁷⁷

⁷⁴ *Report of Atlantic City Conference*, 220.

⁷⁵ After the compensation conference adjourned, the conference organizers held a second conference, in Washington, D.C., on January 20th, 1910. The published excerpts of this conference are a brief eleven pages, and questions of the costs of compensation laws predominated. *Proceedings: Third National Conference, Workmen’s Compensation for Industrial Accidents, Chicago, June 10-11, 1910* (n.p., n.d.), 124-135.

⁷⁶ *Report of Atlantic City Conference*, 315.

⁷⁷ While this perspective centered on maintaining capitalism, it involved a significant sense of markets as limited. This sense that markets needed supplementing was widespread in this era, and not only in the form of state regulation: trusts, mergers, associations, and vertical and horizontal integration by business all formed in various ways non-market responses to economic life, but

When Gray talked about the problem as “an economic one,” he said policymakers needed to “count the cost” of injury in dollars and sense, as opposed to the “human aspects” of injury. Gray here expressed a sense that economic reasoning was a morally thin vocabulary. While this economic perspective could address elements of the problem of family reproduction, important “human aspects” of injury did not fit into this mode of thinking. A disaster shortly after the Atlantic City conference illustrates the aspects of injury that did and did not fit within Gray’s kind of economic perspective on injury law. This disaster, in Cherry, Illinois, also formed an important moment in the national conversation about compensation laws.

On Saturday, November 13th, 1909, twenty year old Samuel Howard became trapped underground when a fire broke out at the St. Paul Coal Company’s mine in Cherry, Illinois. Howard kept a diary of his ordeal, writing about family. He noted that

responses oriented toward continuing capitalism. Business and state personnel alike recognized that, as economist Michel Aglietta has put it, “market mechanisms must be supplemented or supplanted by collective action” as expressed in institutions of “social mediation” like law. Aglietta, “Capitalism at the Turn of the Century,” 10. Numerous historians have argued that fixed-capital intensive companies in the late 19th and early 20th century had a particularly strong tendency to avoid economic uncertainty and, to some extent, to try to avoid or control markets as a result. See Jonathan Levy’s discussion of financier and industrialist George Perkins, *Freaks of Fortune* 264-307. Perkins sought to create a re-organized capitalism which would help free capital accumulation and society more broadly from market-produced risks. Levy notes that Perkins sometimes referred to this as a kind of socialism, implying that the companies Perkins helped organize, U.S. Steel and International Harvester, were a kind of socialist enterprise. Raniero Panzieri has pointed out that this view was common among Marxists in the early 20th century: planning and risk-reduction were seen as antithetical to capitalism, such that any forms of capital accumulation involving economic planning and reduction of the use markets were seen as inherently steps toward socialism, rather than being a matter of variants of capitalism. Raniero Panzieri, “Surplus Value and Planning: Notes on the Reading of Capital,” in *The Labour Process and Class Strategies*, ed. Conference of Socialist Economists (London: Conference of Socialist Economists, 1976), 4-25. More broadly on mergers and other shifts toward non-market forms of association in late 19th and early 20th century capitalism, see James Livingston, *Origins of the Federal Reserve System, 1890-1913*, 27; Martin Sklar, *The Corporate Reconstruction of American Capitalism, 1890-1916*, 1-40; Michael Perelman, *Railroading Economics*; Harland Prechel, *Big Business and the State*; Lamoreaux, *The Great Merger Movement in American Business, 1895-1904*, 87; Stanley Buder, *Capitalizing on Change*, 119-233

his fifteen year old brother Alfred was among the miners trapped with him. Samuel and Alfred Howard financially supported their mother, Salina Howard, and their four siblings. Howard worried about what his accident meant for his family's well-being, wondering who would "help mother out after I am dead and gone."⁷⁸ In his concern for his mother, Howard worried about reproductive and income concerns for his mother and his siblings, though presumably he understood his concerns in more personal terms than labor supply and aggregate social stability, more laden with "human aspects" as Gray had put it, rather than being strictly an economic problem in Gray's sense of that term. Other aspects of Howard's experience did not fit within an economic definition of the problem of injury. He wrote on Sunday, November 14, 1909, "if I am dead, give my diamond ring to Mamie Robinson. The ring is at the post office. I had it sent there."⁷⁹ Howard had planned to give Robinson the engagement ring engraved with her initials on that day. Eight days after the Cherry fire, rescue workers would discover twenty one miners alive in the mine. Samuel Howard and his brother Alfred were not among them. Robinson reported to the newspapers that she and Howard had planned to marry on Christmas Day.

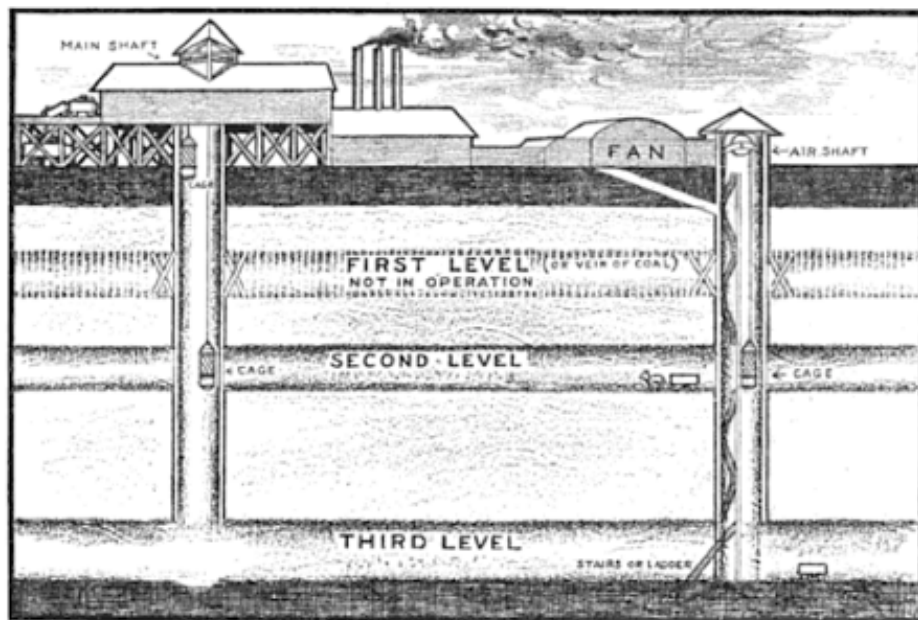
⁷⁸ "Dying Miner's Diary Details His Fight for Life," *Chicago Daily Tribune*, November 24, 1909, 4. For letters to their families by survivors of Cherry mine disaster prior to their rescue, see Edith Wyatt, "Heroes of the Cherry Mine," *McClure's Magazine*, volume 34, number 5, March 1910, 473-492.

⁷⁹ "Dying Miner's Diary Details His Fight for Life."

Figure 3. Mourners and coffins after the Cherry mine fire.⁸⁰



Figure 4. Diagram of the Cherry mine.⁸¹



⁸⁰ "Cherry Mine disaster, mourners and coffins," Prints & Photographs Online Catalog, accessed April 1, 2013, <http://www.loc.gov/pictures/resource/ggbain.04370/>

⁸¹ Edith Wyatt, "Heroes of the Cherry Mine," *McClure's Magazine*, volume 34, number 5, March 1910, 473-492, 489

Figure 5. Crowd at the Cherry mine.⁸²



Figure 6. Crowd at the Cherry mine.⁸³



⁸² “Chery Mine disaster, crowd at mouth of shaft,” Library of Congress, Prints & Photographs Online Catalog, accessed April 1, 2013, <http://www.loc.gov/pictures/item/ggb2004004371/>

⁸³ *Chicago Daily News negatives collection*, DN-0055349. Courtesy of Chicago History Museum. Library of Congress, American Memory, accessed April 1, 2013, <http://memory.loc.gov/cgi-bin/query/r?ammem/AMALL:@field%28NUMBER+@band%28ichicdn+n055349%29%29>

The Cherry fire came during public and political deliberations over how to best govern the problem of employee injuries and shaped those deliberations. After the Cherry fire, Illinois's Governor Charles Deneen called a special legislative session.⁸⁴ At Deneen's urging, the General Assembly donated \$100,000 to the relief fund for the families of the miners killed at Cherry and created an employers' liability commission. Writing in *The Survey*, Graham Taylor called the employers liability commission bill "at least some compensation for the greatest coal mine disaster ever suffered by the people of Illinois" adding that the results could "help set the standard for protective and compensatory laws in other states."⁸⁵

⁸⁴ "New Date of Extra Session," *Chicago Daily Tribune*, November 30, 1909, 5. *Journals of the Senate and House of Representatives: Special Session of the 46th General Assembly of the State of Illinois* (Springfield: State of Illinois, 1910), 13.

⁸⁵ Graham Taylor, "Industrial Survey of the Month," *The Survey*, January 1, 1910, 476.

Figure 7. Children of miners killed in the Cherry fire.⁸⁶



Many people worried about the breakdown of families in the aftermath of the Cherry fire. The fire killed 259 men and left over 600 people without income.⁸⁷ After the fire, many people asked, in the words of the Illinois Bureau of Labor Statistics, “what is to become of the widows and orphans?”, a question with both moral and social-reproductive connotations.⁸⁸ John E. Williams, a volunteer highly involved in the relief

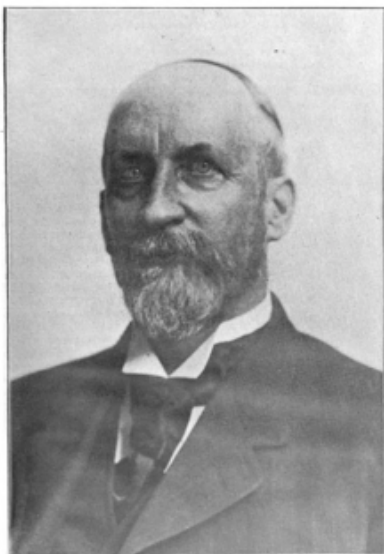
⁸⁶ “Group made orphans by Cherry Mine disaster where 400 men were entombed, Nov. 13, 1909, Cherry, Ill.,” Library of Congress, Prints & Photographs Online Catalog, accessed April 1, 2013, <http://www.loc.gov/pictures/item/2011661524/>

⁸⁷ The fire at the Cherry mine started from kerosene lamps that the St. Paul Coal Company used to replace the mine’s recently failed electric lighting. Kerosene from one of the lamps soaked hay used to feed mules in the mine. Miners managed to douse the burning hay, but not before the timbers of the mine caught fire. “ASK STATE TO FIX FAULT FOR HORROR,” *Chicago Daily Tribune*, November 16, 1909, 3. See also “1909 Cherry Mine Fire,” Ballard C. Campbell, *Disasters, Accidents, and Crises in American History: A Reference Guide to the Nation’s Most Catastrophic Events* (New York: Facts on File, 2008), 1909.

⁸⁸ Illinois Bureau of Labor Statistics, State Board of Commissioners of Labor, *Report of the Cherry Mine Disaster* (Springfield: State Printer, 1910), 65. The miners killed at Cherry left behind “159 widows, 38 children 14 years of age or upward, and 352 children under 14” as well as many “aged parents, young

effort at Cherry, helped answer this question in practice. Williams, a former coal miner turned businessman, estimated that the families of the miners killed at Cherry needed half a million dollars more than the relief fund had received in donations. Williams prevailed upon Albert J. Earling, president of the Chicago, Milwaukee, and St. Paul Railway, the St. Paul Coal Company's only client. Earling agreed that his company would cover the remaining half million dollars.

Figure 8. John E. Williams⁸⁹



In a letter to Williams, Earling captured three central elements of the relief efforts at Cherry, elements characterizing injury compensation efforts more broadly. Earling wrote “I hope no question more appalling or more difficult to solve will ever come to any corporation than that involved in doing justice to the survivors at Cherry. There were two

brothers or sisters, or other near relatives,” according to the American Red Cross. U.S. House, *Sixth Annual Report of the American National Red Cross*, 61st Cong, 3rd sess., Feb. 21, 1911, H. Doc. 1399, 20.

⁸⁹ *Report of the Cherry Mine Disaster*, 67.

survivors of that disaster, the bereaved and stricken people, and the ravaged corporation.” In this quote Earling expressed a desire to provide for the financial well-being of families who lost their income, a concern that this provision be compatible with the security of business, and an implied sense of ‘doing justice’ narrowed to ‘providing financial compensation.’

The agreement with the Chicago, Milwaukee, and St. Paul Railway was widely praised. One commentator hailed it as an “Epoch-Making Settlement Between Labor and Capital.” J.E. Williams described the “the principle of the proposal” he had made to Earling as “the principle of the English law” of workmen’s compensation: “for each accidental death the equivalent of three years’ earnings.”⁹⁰ This is what the families of the deceased would receive, an average payment of \$1,800 per family.⁹¹ What the company received was an agreement by the families not to file lawsuits. As Williams would later put it in his testimony before the U.S. Commission on Industrial Relations, Williams’s “efforts of mediation” between businesses and the families of victims in Cherry “resulted in preventing a lawsuit involving a great number of claims.”⁹² That same lawsuit avoidance goal had informed business support of compensation laws.

The settlement with the railway company may have originated at a meeting on Saturday, January 16th, when a group of women whose husbands had died in the mine met with officers from the United Mine Workers, J.E. Williams, and others from the local relief commission. The January 16th meeting empowered a committee to negotiate on

⁹⁰ *Report of the Cherry Mine Disaster*, 74.

⁹¹ *Report of the Cherry Mine Disaster*, 85, 88.

⁹² U.S. Congress, Senate, Commission on Industrial Relations, *Final Report and Testimony*, vol.1, 710.

their behalf with the Chicago, Milwaukee, and St. Paul Railroad Company.⁹³ Whether this meeting ratified or generated J.E. Williams's plan for a settlement is unclear, but it clearly played an important role in the process leading to the settlement. At this meeting someone presented a financial argument: the damages that the claimants sought equaled three million dollars but the St. Paul Coal Company only had capital worth \$350,000. Thus even if the company was put out of business entirely, with all of its assets liquidated and all of that money turned over to the victims' families, the claimants would only receive 1/10th of the damages they sought. This situation underscored the difficulty of meeting reformers' goal of creating income security for employees if that goal was met employees' immediate employers alone. Hence the need for a social perspective.

The St. Paul Coal Company seems to have settled most suits, but not everyone in Cherry agreed to settlement. *Coal Age*, a trade publication, reported that there were 113 suits brought after the Cherry fire.⁹⁴ *Fuel Magazine*, a weekly news publication for coal mine operators, reported that the Bureau Country court was about to begin the first of fifty-two lawsuits bought by the families of miners who died at Cherry. The first case to be heard was that of Miles McFadden. "This will be the test case," *Fuel* wrote, "The fate of the others probably will rest on the outcome of the McFadden suit, as the allegations

⁹³ "Cherry Disaster Claims," *The Black Diamond*, Jan. 22, v44 no. 4, 18.

⁹⁴ *Coal Age*, vol. 2, no. 14, October 5, 1912, 474.

are identical.”⁹⁵ Miles McFadden won \$2500 for the death of his son Andrew in the Cherry disaster.⁹⁶

After the settlement brokered by J.E. Williams, the Cherry Relief Commission was set up to oversee disbursement of the funds collected, forming a private, local administrative body for governing working class access to money in the aftermath of injury. The commission was made up of personnel from the Red Cross, the United Mine Workers, the Coal Operators’ Association of Illinois, the Illinois state government, and J.E. Williams. Ernest Bickle, national director of the American Red Cross and a member of the Cherry Relief Commission, described the “chief feature” of the relief commission’s plan as “a system of pensions to be paid to widows with young children until the children are old enough to legally take wage-earning employment.”⁹⁷ The relief

⁹⁵ “The Cherry Damage Cases,” *The Fuel Magazine*, vol. 19, no. 5, June 4, 1912, 174.

⁹⁶ *McFadden v. St. Paul Company*, 263 Ill. 441; 105 N.E. 314. I have found one other lawsuit brought in response to the Cherry fire. A Mrs. Monahan received a payment of \$1620 for the loss of her husband. This appears to have been a standard agreement in the Cherry fire; Monahan’s \$1620 was 90% of the \$1800 settlement, with the other 10%, \$180, going to her legal fees. *The Public* newsmagazine reported that this settlement agreement applied in forty one suits brought by the families of men killed in the Cherry mine fire. Monahan claimed that she did not have her glasses when she signed the settlement paperwork waiving her right to sue, and that the company lawyer misrepresented the agreement’s contents to her, saying that the agreement was that she would receive at least \$1800 for her husband’s death and that if anyone received a higher settlement she would receive an additional amount equal to the difference between her settlement and the higher one. The trial court found for the St. Paul Coal Company. The Second District Court of the Illinois Court of Appeals overturned this decision and ordered a retrial. I have not been able to locate any information on that retrial.

⁹⁷ State of Illinois, Board of Administration, *Fourth Annual Report* (Springfield: Illinois State Journal Co., State Printers, 1915), 86. Financial maintenance of women so that they might continue to play a reproductive role also involved disciplining women. The payments of pensions involved supervision and surveillance of the widowed women in Cherry, as historian Marian Moser Jones has argued in her work on the history of the American Red Cross. For example, in 1911 the Cherry Relief Commission suspended support payments to Maria Guglielmi after discovering that she was living in a saloon and that her two children were living in Italy. Eighteen months later when the commission found that Guglielmi and her children were cohabitating with a man to whom Guglielmi was not married, the commission began to discuss having her children removed from her custody. See Marian Moser Jones, *The American Red Cross from Clara Barton to the New Deal* (Baltimore: Johns Hopkins University Press, 2013), 153. Jones notes

commission defined this age as fourteen years old. Families with multiple children would typically lose their funding when the oldest child became fourteen; presumably financial responsibility for the household's income would then transfer from the relief fund to that child.

The responses to the Cherry fire display in microcosm many of the larger themes present in the discussions over workmen's compensation, like reproduction and security. Cherry also formed a kind of experiment in dealing practically with the problem of injury outside the court system, and it helped shape the shift toward workmen's compensation laws. The Illinois Bureau of Labor Statistics prepared a special report on the Cherry fire. It argued that mining's human cost "in dead and disabled can be figured with almost mathematical precision. Our casualty lists (...) attest the awful toll in life and limb inexorably exacted (...) The record shows that with every so many tons of coal, there is lifted to the sunlight the bruised or lifeless bodies of men." Despite this terrible cost, the report noted in its introduction that many people had become inured to coal mining deaths, treating them as "seemingly inevitable. (...) We have in a sense become accustomed to the annual loss of hundreds of mine workers distributed quite uniformly through the working days of the year, lives that are separately but regularly offered as a sacrifice to the demands of the industry, and the slaughter proceeds without exciting any

that the American Red Cross took its efforts in Cherry as the template for future relief work in industrial disasters. I have found only one example of workmen's compensation payments used to discipline widowed women. The compensation law of West Virginia said in 1917 that "if upon investigation it shall be ascertained that a woman receiving payments as a widow under workmen's compensation was co-habituating with a man without marrying or was living a life of prostitution, the commissioner shall stop shall stop the payment of the benefits." "Workmen's Compensation Laws of the United States and Foreign Countries," *Bulletin of the United States Bureau of Labor Statistics*, no. 203, January 1917, 899.

special public comment.”⁹⁸ The Cherry fire concentrated the cost of mining in deaths into one incident and in doing so created a great deal more attention than the regular accumulation of fatalities.

At the end of its 1910 report on the Cherry fire the Illinois Bureau of Labor Statistics included a section on workmen’s compensation legislation. It noted that the American Mining Congress, an organization of coalmine operators, had recently come to support compensation laws, perhaps in part due to the Cherry mine settlement which allowed the St. Paul Coal Company to avoid many lawsuits. The BLS report praised the coal operators’ humanitarianism and “their business sense,” as expressed “in an organized effort to dispense with the unjustifiable waste that marks every attempt to adjudicate accident claims under existing law.” The report lauded the effort to replace the court-based system of injury law with “a plan, inexpensive and easy of informcement [sic].”⁹⁹ Other businesses and business associations shared this business sense with their support for compensation laws.

The Illinois BLS report attacked lawyers, but the implication was that the real problem was lawyers for injured plaintiffs, noting that legal costs were wasteful and unfair to businesses. The report lamented that Americans were late in adopting “the most important conservation movement,” workmen’s compensation, pointing out that twenty one other countries had already done so. The United States was “the only civilized nation

⁹⁸ *Report of the Cherry Mine Disaster*, 7.

⁹⁹ *Report of the Cherry Mine Disaster*, 81.

in this respect that persists in its adherence to an out-grown, obsolete legal policy.”¹⁰⁰

Sounding a note in tune with the Atlantic City conference on accident compensation, the commission report said that workmen’s compensation was “based on the sound economic theory that the losses sustained by workmen from accidents received in the line of their employment is a legitimate tax upon the industry” that should be “charged against the business in the same manner as breakages, depreciation of plants and other unavoidable costs of production.”¹⁰¹ The report also noted that these and similar costs were already paid, just in an inefficient and unpredictable manner, adding that an unnamed manufacturer had found he paid in liability insurance five times the cost he would pay for all his injured workers’ cost, if the injured were compensated according to the English workmen’s compensation act.¹⁰²

The deaths at Cherry gave more energy and a new rhetorical reference point to calls for workmen’s compensation. Thomas Burke, editor of the *Plumbers, Gas and Steam Fitters Journal*, called for “universal laws to provide adequate care and compensation for the victims of industrial accidents and those dependent on them. A disaster like that of the Cherry mine loses some of its appalling horror when it is known that the widows and helpless children are to be provided for by the state mandate, and not

¹⁰⁰ *Report of the Cherry Mine Disaster*, 81.

¹⁰¹ *Report of the Cherry Mine Disaster*, 83.

¹⁰² *Report of the Cherry Mine Disaster*, 84. The BLS report also reprinted an article by Sherman Kingsley of the United Charities of Chicago, which called for workmen’s compensation and noted that U.S. manufacturers had recently paid ninety five million dollars in liability insurance premiums of which only about thirty million wound up in the hands of injured employees and their families. *Report of the Cherry Mine Disaster*, 90.

to be plunged into the class of public charges - paupers in one day.”¹⁰³ J.A. Holmes, Director of the U.S. Bureau of Mines spoke on mine safety at the Tenth Annual Meeting of the National Civic Federation just days after the Cherry mine fire. Holmes argued that the political economy of coal mining helped produced accidents. He argued that this political economy meant that the problem could only be address by law, noting that “[t]he economic conditions upon which coal mining is based in this country are so fundamentally bad, and the evil consequences so far-reaching (...) and are so essentially national in character, that this subject demands the earnest consideration of our best statesmen.”¹⁰⁴ The Missouri Division of Mine Inspection referenced the Cherry disaster in a call for compensation laws as well, writing that with “[t]he horrors of the Cherry mine disaster (...) still fresh in the minds of everyone” state legislatures needed to enact “an equitable liability and compensation law that will protect the laborer and those depending upon him.”¹⁰⁵ The relief effort at Cherry gave more support to calls for workmen’s compensation not least because the relief effort in Cherry basically operated a locally instituted workmen’s compensation program.

The Cherry relief effort provided a concrete working example of workmen’s compensation in action in the United States. In his book *The Social Creed of the Churches*, Harry Frederick Ward of the Methodist Federation for Social Service compared the handling of workplace injury compensation in several states. He cited the

¹⁰³ *Plumbers’, Gas and Steam Fitters’ Journal*, vol. 16, no. 4, April 1911, 35.

¹⁰⁴ *Bureau of Mines, Mining and Mine Inspection of the State of Missouri for the Year Ending December 31, 1909* (Jefferson City: The Hugh Stephens Printing Company, 1910), 18.

¹⁰⁵ *Bureau of Mines, Mining and Mine Inspection of the State of Missouri*, 12.

Pittsburgh Survey's work, which focused on 526 people killed on the job, with more than half of these fatalities being completely uncompensated. Out of 236 workplace fatalities investigated by the New York accident commission, half received only funeral expenses. In Wisconsin, only one third of 51 fatalities resulted in payments higher than \$500. Compared to these examples, Ward wrote, "[t]he compensation paid to the victims of the Cherry mine disaster comes like an oasis in a dry desert," with settlements averaging \$1,800 per family of the deceased." Ward asserted as well that under many European countries' compensation laws, even the comparatively well-compensated Cherry claimants would have received twice as much.¹⁰⁶ Ward estimated that 20,000 families each year were "reduced to poverty" by industrial accidents which often resulted in "the women and children going to work."¹⁰⁷

The Cherry mine disaster provided further impetus for the creation of workmen's compensation legislation around the United States. More than that, Iowa Industrial Commissioner Warren Garst said that the disaster relief effort in the aftermath of the Cherry disaster provided a practical example of how to administer funds for the families of the miners, based "on the general plan of the English Compensation Act." Furthermore, compensation was more equitably distributed by the relief fund than the distribution of funds achieved by lawsuit. "S. C. Kingsley, of the United Charities of Chicago, made a comparison between fifty families at Cherry so quickly relieved under the new plan, and fifty representative families in various cities east and west who had

¹⁰⁶ Harry Frederick Ward, *The Social Creed of the Churches* (New York: Abingdon Press, 1914), 99.

¹⁰⁷ Ward, *The Social Creed of the Churches*, 100.

recently lost their breadwinners in industrial accidents but were left dependent on lawsuits and haphazard charity for relief in the old way.”¹⁰⁸ This research found \$90,000 of \$100,000 collected went to people affected by the Cherry disaster, thus an average of \$1800 for each of the 50 families, compared to a total of \$9,149 for the fifty families who sought compensation through the courts, an average of less than two hundred dollars each.¹⁰⁹

The Cherry mine disaster was an important moment in the history of workmen’s compensation laws in the United States in Illinois and beyond.¹¹⁰ In addition, the event stands as a kind of microcosm of the development of workmen’s compensation. In this incident reformers and government officials oriented toward the financial maintenance of working class families in the aftermath of injuries to male wage earners. As the Illinois Bureau of Labor Statistics put it, workmen’s compensation was based on “the sound economic theory” that costs of employees’ accidents should be charged to employers as “a legitimate tax upon the industry.”¹¹¹ Implied in the economic theory expressed by workmen’s compensation was an appreciation of both the role of money in the

¹⁰⁸ Warren Garst, *First Biennial Report of the Iowa Industrial Commissioner to the Governor of the State of Iowa for the Period Ending June 30, 1914* (Des Moines: State of Iowa, 1914), 28. Garst’s report included the slogan “Relief by schedule, aid for all, revenge for none.”

¹⁰⁹ Garst, *First Biennial Report*, 29.

¹¹⁰ Historians’ accounts of compensation laws have tended to over-emphasize the role of New England states and underestimate the Midwestern states’ role in compensation laws. See for example John Witt’s *Accidental Republic* and Richard Greenwald’s *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era New York*. While there were important developments in those states and those developments played important roles in the evolving national conversation about compensation laws, the same is true of the Midwestern states. Indeed, the Minnesota accident commission organized the first national conference, and Wisconsin-based economist and accident commissioner John R. Commons played a key role as well, as discussed in David Moss’s *Socializing Security*. See also Donald Rogers’s account of the importance of 19th century safety law innovations in Wisconsin in his *Making Capitalism Safe*.

¹¹¹ *Report of the Cherry Mine Disaster*, 83.

maintenance and reproduction of the working class and of the role of the working class family as an institution for maintaining and reproducing labor markets.¹¹² This theory in general terms, and the ways it was practiced in the relief efforts in Cherry, informed the process of formulating compensation laws.

In March, 1910, with the Cherry disaster still a recent memory, the Illinois Employers' Liability Commission issued its report. "Statistics," wrote the commission, "show that probably fifty percent of the accidents which occur in industry are (...) due entirely to the inevitable and inherent hazard of the trade, or, what the French economists call the 'risque professional.'" The commission here expressed a sentiment common to people concerned with injury law in the early 20th United States, that many injuries were no one's fault and were inherent within industry. This, of course, presumed that industry itself was fixed and that the arrangements in industry were no one's fault. The

¹¹² Changes in injury law in the early twentieth century United States could be seen as a matter of state navigation of tensions between the mode of production and the mode of reproduction. See Lise Vogel, "Marxism and Feminism: Unhappy Marriage, Trial Separation or Something Else?" 195-218, in Lydia Sargent, ed., *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism* (Boston: South End Press, 1981). The analytical utility of these terms should not be overestimated, though; talk of 'mode of production' in the marxist tradition is often more a matter of heat than light. The category often reflects Raymond Williams's judgment that "Marxist cultural analysis (...) is very much more at home in what one might call epochal questions than in what one has to call historical questions. That is to say, it is usually very much better at distinguishing the large features of different epochs of society, as between feudal and bourgeois, or what might be, than at distinguishing between different phases of bourgeois society, and different moments within the phases: that true historical process which demands a much greater precision and delicacy of analysis than the always striking epochal analysis which is concerned with main lineaments and features." Raymond Williams, "Base and Superstructure in Marxist Cultural Theory," 31-49 in Raymond Williams, *Culture and Materialism: Selected Essays* (London: Verso, 1980); 38. For other readings on 'mode of production', see Harry Cleaver, *Reading Capital Politically*, (London: AK Press, 2000), 41-42; Cooper, "Africa and the World Economy," in Cooper et al *Confronting Historical Paradigms: Peasants, Labor and the Capitalist World System in Africa and Latin America* (Madison: University of Wisconsin Press, 1993) 84-204, especially 99-101; Ellen Meiksins Wood, "Falling Through the Cracks: E.P. Thompson and the Debate on Base and Superstructure," in Harvey J. Kaye and Keith MacLelland, eds., *E.P. Thompson: Critical Perspectives* (Philadelphia: Temple University Press, 1990), 125-152, especially 129-132.

Commission added that “the Moloch of industrial activity demands a sacrifice of human life and limb, constant, as the actuaries’ tables show, and inevitable so long as human contrivances and human understanding are fallible.”¹¹³ From this perspective the problem of workplace injury was not primarily a matter of injustice but an unavoidable fact of life in complex industrial society. While the commission concerned itself with justice and injustice, this framing shifted the issue away from the fact of injury and its human consequences, and toward the financial aftermath of injury. Justice or injustice became a matter of whether workers or their surviving dependents were paid enough money to replace lost income. On this matter, the commission used morally charged terms, denouncing “the evils of the present situation and the necessity for a radical improvement,” meaning a re-allocation of costs and redistribution of funds in the aftermath of workplace injury. To dramatize the stakes of injury compensation reform, the Commission told a brief story.

The Commission found that in the aftermath of fatal injuries the families of the deceased often “had disintegrated or moved away.” A “persevering investigator” employed by the commission, however, had managed to follow “the available clues [sic] and found that a widow, left helpless by the killing of her husband, had been driven into a life of immorality.” The Commission editorialized that “[t]he industry which took her husband’s life took (...) a great deal more” as the widowed woman “was keeping her four

¹¹³ *Report of the Employers’ Liability Commission of the State of Illinois* (Chicago: Stromberg, Allen, & Co., n.d.), 9.

little girls on the wages received for the sale of her person.”¹¹⁴ With similarly persistent research, the Commission, suggested similar instances might be found and in any case out of the 1,000 cases found “hundred of families became broken up and migratory.” With this story of family income replaced by a turn to prostitution, the Commission helped frame a call for “a reform of the evils” of the present system of workplace injury in order to formulate a system of “adequate support for the families deprived by industry of their bread winners.”¹¹⁵ Inadequate financial compensation of injuries could lead to social evils, thus compensation must be made adequate. These social evils centered on the family, women, and gender. Sex for sale: an immoral injustice. Maiming and death: an industrial inevitability.

In this anecdote a woman turned to prostitution in order to secure the income needed to support her children after the loss of her husband’s income, which required the state to act. The commission here bundled together morally charged notions of gender roles and sexuality as well as the relationship between income and social reproduction. Some means of reproducing families were moral – such as waged manual labor by male heads of household – while others – such as waged sexual labor by female heads of household – were immoral.¹¹⁶ With workmen’s compensation, policymakers sought to

¹¹⁴ *Report of the Employers’ Liability Commission*, 10.

¹¹⁵ *Report of the Employers’ Liability Commission*, 11. In its research, the Illinois Commission assembled a list of 5,000 recent workplace injury legal cases, with approximately 1,000 involving fatal injuries. The commission ran into great difficulties in its effort to learn about the aftermath of those fatal injuries because of the dislocation brought about by these injuries: the effects of injuries themselves were an obstacle to efforts to producing knowledge about those effects.

¹¹⁶ For a discussion of prostitution and market society in U.S. history, see Amy Dru Stanley, *From Bondage to Contract: Wage Labor, Marriage, and the Market in the Age of Slave Emancipation* (Cambridge: Cambridge University Press, 1998), 218-263. In the culture of the late 19th century, and

intervene in the way in which income shaped family, in part because family was taken as an economic factor.

The same month as the Illinois report, March of 1910, New York's Commission on Employers' Liability proposed a workmen's compensation law. The Commission, often called the Wainwright Commission, after its chair, Senator J. Mayhew Wainwright, called for workmen's compensation to be required in especially dangerous industries.¹¹⁷ The proposed New York law was modeled after the British compensation act, limiting employers' legal defenses against injury suits and allowing injured workers to choose whether to sue or to opt for compensation.¹¹⁸ For workers outside especially dangerous industries, the Wainwright Commission proposed an elective system of workmen's compensation, which employers could choose to opt into. The law encouraged employers to opt in by restricting employers' legal defenses if they did not choose to opt in.¹¹⁹ New York's legislature soon passed the Wainwright Commission's proposed workmen's compensation law.

By this time, the national compensation conference had become an organization:

The National Conference on Workmen's Compensation for Industrial Accidents. The

this culture no doubt still existed in the 1910s, women engaging in extramarital sex was out of bounds according to prevailing morality. Economic arrangements helping create prostitution thus reflected poorly on those arrangements in that according to the dominant perspective sex was to take place for non-instrumental reasons rather than as instrumentalized market exchanges.

¹¹⁷ Dangerous occupations included "bridge building, operation of elevators, work on scaffolds, work on electric wires, working with explosives, work on railroads, in the construction of tunnels and work generally carried on under compressed air." "Court Invalidates New Liability Law," *New York Times*, March 25, 1911, 3.

¹¹⁸ David A. Moss, *Socializing Security: Progressive Era Economists and the Origins of American Social Policy* (Cambridge: Harvard University Press, 1996), 123.

¹¹⁹ Moss, *Socializing Security*, 124

third national meeting, and National Conference's first as a formal organization, took place in Chicago in June of 1910. About seventy people attended this meeting, including government officials, insurance company personnel, and labor union officials. Officials from the compensation and liability commissions of seven different states spoke at the conference. Crystal Eastman, speaking for the New York Employers' Liability Commission, noted that the New York State Labor Department's investigation into "the loss of income to the man injured" and "the effect of the accident upon his family" allowed the commission to get a sense of "the economic cost of work accidents."¹²⁰ Eastman here used 'economic' in an expanded sense to include financial costs as well as the stability of working class families. Joseph Parks of the Massachusetts commission underscored the importance of family maintenance: "The operatives do not care much about the loss of a finger or the loss of beauty, or any such thing as that," Parks asserted. "The particular thing that the operative is interested in is, if he is a man of family, how his family is going to make out while he is on a sickbed and unable to work."¹²¹ While Parks overstated the degree to which working class people were unconcerned over lost fingers and disfigurement, there is no doubt that many working class people did worry a great deal about the welfare of their loved ones in the event of injury-induced financial catastrophe, as Samuel Howard had worried about his mother's well-being.

¹²⁰ *Proceedings: Third National Conference*, 15.

¹²¹ *Proceedings: Third National Conference*, 29.

Edwin Wright, president of the Illinois Federation of Labor and secretary of the Illinois Employers' Liability Commission reminded the conference attendees, however, of the abstraction involved in accident statistics. It was important, he said, to

understand the real meaning of all these figures in these reports. It is one thing to publish column after column of figures which nobody reads and nobody pays any attention to, but it is an entirely different proposition to get back of those columns of figures and see what they stand for. Those columns of figures stand for men's lives and they stand for the happiness of the family; yes, and they stand for the prosperity of the employer as well.¹²²

Wright here warned of the possibilities for the moral thinning of the ways in which injury as a problem was framed.

In the Cherry disaster, private individuals like J.E. Williams and private actors like the Red Cross played important roles. Private actors played important roles in shaping workmen's compensation policy around the country as well. Business and policy responses to providing security for wage earners and their families were often anticipated by wage-earners themselves, in the form of workers' insurance and fraternal mutual benefit societies. Commercial insurance companies played important roles as well, marketing policies which would at least mitigate the financial, emotional, and social status costs of death by providing for funeral costs. Insurance for wage-earners was decidedly masculine in gender: the income insured by commercial and fraternal mutual insurance was far and away the man's income.¹²³ As such, the gendered components of workmen's compensation laws were of a piece with the gendered aspects of male wage

¹²² *Proceedings: Third National Conference*, 25-26.

¹²³ See Witt, *The Accidental Republic*, 71-102; Jonathan Levy, *Freaks of Fortune*, 191-230, and Moss, *When All Else Fails*, 216-221.

earners' collective efforts at financial security for their families (and maintenance of their positions within families as hierarchical institutions) in the face of workplace injury. Men could enroll in these security measures; what was secured was men's income, and the point was in part to shore up the family when the man's role was temporarily disrupted by injury. This provided a kind of financial security to family members and a social/familial structural security to breadwinners and others in society. Compensation and insurance payments provided a kind of financial surrogate father and husband; the family was preserved, as was the role of the male breadwinner if he recovered enough to once again take the role of household wage-earner.

The New York Court of Appeals struck down the statute requiring workmen's compensation in March of 1911, nine months after the act's passage.¹²⁴ In the case of *Ives v. Buffalo Railway Company* the defendant employer argued that the compensation law amounted to a taking of the company's property and liberty without compensation. The New York Court agreed, rejecting the law as an unconstitutional violation of due process.¹²⁵ Members of the Wainwright Commission reacted with surprise to the invalidation of the law. "All of us on the commission had fully believed this law would

¹²⁴ Moss, *Socializing Security*, 125; Witt, *The Accidental Republic*, 152. The New York legislature created two compensation laws in 1910, the compulsory law, struck down in 1911, and an optional system. The optional system required both employers and employees to opt in before it operated. First a company would have to declare its intention to fall under the law, then employees of the company would have to agree to fall under the law, waiving their right to sue. By 1913 only one firm had enrolled, and only 38 of that firm's 440 employees. Price V. Fishback and Shawn Everett Kantor, *A Prelude to the Welfare State: The Origins of Workers' Compensation* (Chicago, University of Chicago Press 2000), 130.

¹²⁵ Moss, *Socializing Security*, 125. For a detailed and illuminating study of the *Ives* decision, arguing that the decision stands as a watershed moment in legal notions of causality, see Witt, *The Accidental Republic*, 152-186.

stand,” declared one member.¹²⁶ The decision striking down the compulsory compensation law was highly unpopular, to put it mildly. *The Survey* argued “if decisions of this kind represent their prevailing spirit” then “[c]ourts and constitutions cannot retain public respect and loyalty.” Theodore Roosevelt threatened to try to unseat the judges who decided the case.¹²⁷

The New York Court of Appeals issued the *Ives* decision on March 24, 1911. The March 25th edition of the *New York Times* covered the decision in a neutrally worded article, “Court Invalidates New Liability Law,” which noted that labor union officials who supported compensation legislation had met the evening of the decision in order to discuss their next steps. While clearly important, the article’s placement on page three speaks to the issue’s relative newsworthiness, at least judged by the *Times*. The next day, workplace safety would scream from the *Times*’ front page headlines in all capitals: “141 MEN AND GIRLS DIE IN WAIST FACTORY FIRE; TRAPPED HIGH UP IN WASHINGTON PLACE BUILDING; STREET STREWN WITH BODIES; PILES OF DEAD INSIDE.”¹²⁸ The fire at the Triangle Shirtwaist Factory began at the end of the workday the day after the *Ives* decision. The fire, which killed 146 people, mostly girls and women, would add even greater gravity to the issue of workplace injury law,

¹²⁶ “Court Invalidates New Liability Law,” *New York Times*, March 25th, 1911, 3.

¹²⁷ Robert Wesser offers a detailed account of the legislative process through which New York formulated its compensation law. Robert Wesser, “Conflict and Compromise: The Workmen’s Compensation Movement in New York, 1890s-1913,” *Labor History*, No. 12. (Summer, 1971), 365-66, 359.

¹²⁸ “141 MEN AND GIRLS DIE IN WAIST FACTORY FIRE,” *New York Times*, March 26th, 1911, 1. See also Richard A. Greenwald, *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era* (New York. Philadelphia: Temple University Press, 2005), 129-153.

especially as the appalling safety conditions at the factory came out in the aftermath of the fire.

One outcome of the Triangle fire was the creation of the Factory Investigating Committee (FIC), a body that included future New Deal political figures Robert F. Wagner and Frances Perkins. The FIC conducted public hearings and hired investigators to look into a number of workplace health and safety issues, including fires, accidents, sanitation, and work hours.¹²⁹ The Factory Investigating Committee's work provided another platform for advocates of workmen's compensation, like official reports in the aftermath of the Cherry fire. Near the end of his testimony before the FIC, the commission asked Charles A. Miles, an organizer with the United Textile Workers of America, if he wanted to add anything further. In his remarks he called attention to the damages for injuries, citing an accident in a textile mill where the employer offered three hundred dollars for an employee's arm being torn off. For Miles this was evidence of the need for a compensation law.¹³⁰ Edward Pratt, an investigator for the FIC described another uncompensated injury, writing about an employee who suffered lead poisoning and developed paralysis of both arms. He had been taken in by another family, where he lived "in a cellar with practically nothing at all, and was eating the scraps that were thrown out from the table. He has never had any compensation of any kind from the company."¹³¹ Samuel McCune Linsday, director of the New York School of Philanthropy

¹²⁹ Greenwald, *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era*, 154-213.

¹³⁰ *Preliminary Report of the Factory Investigating Commission*, vol. 3 (Albany: Argus, 1912), 1314.

¹³¹ *Preliminary Report of the Factory Investigating Commission*, vol. 3 (Albany: Argus, 1912), 1693

urged the commission “to make the strongest possible recommendation in favor of a constitutional amendment in this State that will permit a workman’s compensation law.”¹³²

The FIC report referred to the committee as “the first general investigation that has been made by any legislature in this country” into the health and safety of workers, though the commission noted there were important antecedents such as the Illinois Occupational Disease Commission and several states’ compensation commissions.¹³³ At a public hearing in October of 1911, Abram Elkus, the Commission’s attorney, referred to other states’ compensation laws as “admirable legislation.” In his testimony, Louis Schram of the National Civic Federation’s Department on Compensation for Industrial Accidents and Prevention argued that the German compensation system had made work in Germany safer.¹³⁴

In their second report, the FIC said that while they had “made no special study” of workmen’s compensation, they felt their report would be incomplete without a strong and earnest plea for the enactment of a proper and just workmen’s compensation law, that will place the burden of an industrial accident on the industry as represented by the employer rather than on the unfortunate victim of the industry, and that will provide just and fair compensation to workers or their families for death or injury caused by accident in the course of employment.¹³⁵

Historian Richard Greenwald situates the FIC within a turning point in industrial relations in New York and nationally. Greenwald charts previous efforts at governing

¹³² *Preliminary Report of the Factory Investigating Commission*, vol. 3 (Albany: Argus, 1912), 1726.

¹³³ *Preliminary Report of the Factory Investigating Commission*, vol. 1 (Albany: Argus, 1912), 117.

¹³⁴ *Preliminary Report of the Factory Investigating Commission*, vol. 1 (Albany: Argus, 1912), 486.

¹³⁵ *Second Report of the Factory Investigating Commission*, (Albany, N.Y.: Argus, 1912), 242.

employment and mediating industrial disputes, efforts that created non-state bodies made up of people from the labor movement, business, and concerned expert citizens. With the Triangle fire and the FIC, Greenwald argues, reformers became much more focused on the state as arbiter of disputes. The neutrality and objectivity of experts as representatives of the public good became much more tied to state-affiliated personnel, while those experts also gained access to the state's greater enforcement abilities.¹³⁶ In this way, state commissions became key sites for social liberals, and the transition from calls for social liberal policies to actual policy creation. Similar efforts happened around the country as part of the process of analyzing the problem of wage earners' injuries and formulating policy responses.

In order to get a new compensation law passed after the *Ives* decision, advocates of compensation laws focused on amending the state's constitution in order to allow workmen's compensation. This push for an amendment succeeded and the New York legislature again passed a compensation law in 1913.¹³⁷ The proposed amendment and legislation won out in part because it was backed by insurers and manufacturers. Business support for a compensation law in New York was part of a national trend. By 1913 a clear consensus had emerged in policy that the problem of workplace accidents was primarily a matter of providing income support to the families of injured married male

¹³⁶ See Greenwald, *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era*. Employers' liability commissions similarly tended to be made up of representatives of businesses and of unions, acting as representatives of both unionized and non-unionized wage earners, and of lawyers and social scientists who represented the general public.

¹³⁷ Price V. Fishback and Shawn Everett Kantor, *A Prelude to the Welfare State: The Origins of Workers' Compensation* (Chicago, University of Chicago Press 2000), 130.

wage-earners, and workmen’s compensation was the best institutional mechanism for providing this income support. By the end of that year, 22 states had compensation laws. Other states rapidly following suit, with forty states having such laws by 1920.

*Table 3. State adoption of compensation law by year, 1911-1920*¹³⁸

Year	States adopting compensation law this year
1911	California, Illinois, Kansas, Massachusetts, New Hampshire, New Jersey, Ohio, Washington, Wisconsin
1912	Maryland, Michigan, Rhode Island
1913	Arizona, Connecticut, Iowa, Minnesota, Nebraska, New York, Nevada, Oregon, Texas, West Virginia
1914	Louisiana
1915	Colorado, Indiana, Maine, Montana, Oklahoma, Pennsylvania, Vermont, Wyoming
1917	Delaware, Idaho, New Mexico, South Dakota, Utah
1918	Virginia
1919	Alabama, North Dakota, Tennessee
1920	Georgia

The state commissions and policymakers who crafted workmen’s compensation laws, including in the Cherry Relief Commission’s private version of workmen’s compensation, made marriage central to the operation of compensation systems. Marriage as an institution helped organize the distribution of payments in the aftermath of workplace injury, at Cherry and in workmen’s compensation legislation more broadly.¹³⁹

¹³⁸ Price Fishback, “Workers’ Compensation,” in Robert Whaple, ed., *EH.Net Encyclopedia*, March 26, 2008, <http://eh.net/encyclopedia/article/fishback.workers.compensation> accessed April 1, 2013.

¹³⁹ John Fabian Witt has argued that marriage played an important part along these lines in 19th century tort law and in wrongful death statutes modifying tort law. John Fabian Witt, “From Loss of

The role of marriage in workmen's compensation law reflects a long history of gendered political economy. Historian Linda Kerber has argued that in the history of American politics and law, as both social practices and bodies of ideas, married women have primarily been obligated to their husbands and families rather than to the state. "From the era of the American Revolution until deep into the present" this substitution "has been a central element in the way Americans have thought about the relation of all women, including unmarried women, to state power." That the obligation of women to their families has been a "relation (...) to state power."¹⁴⁰ Historian Nancy Cott has written that "most people view [marriage] as a matter of private decision-making and domestic arrangement. The monumental public character of marriage is generally its least noticed aspect (...) the structure of marriage organizes community life and facilitates the government's grasp on the populace."¹⁴¹ Cott writes that "marriage forms" rank high among governmental concerns "because of their direct impact on reproducing and composing the population. The laws of marriage must play a large part in forming 'the people.' They sculpt the body politic."¹⁴² The same can be said of family. Indeed, as Cott documents, marriage has often been a precondition for acceptable families within

Services to Loss of Support: The Wrongful Death Statutes, the Origins of Modern Tort Law, and the Making of the Nineteenth-Century Family," *Law & Social Inquiry* vol. 25, no. 3 (Summer, 2000): 717-755. Wrongful death laws allowed legal dependents to sue for their financial losses when an accident killed the person upon whom they were dependent, which allowed dependent wives and children to sue for the deaths of husbands and fathers. The laws often did not include employee injuries. Witt, 746. Nonetheless, the legal reasoning was similar to that in compensation laws, in the linking of marriage to claims-making ability and access to resources.

¹⁴⁰ Linda K. Kerber, *No Constitutional Right To Be Ladies: Women and Obligations of Citizenship* (New York: Hill & Wang, 1998), 11.

¹⁴¹ Nancy F. Cott, *Public Vows: A History of Marriage and the Nation* (Cambridge: Harvard University Press, 2000), 5.

¹⁴² Cott, *Public Vows*, 5.

American politics, law, and culture. Families may seem private and apolitical but as feminists activists and scholars have repeatedly stressed, the social practice of family life is neither private nor apolitical. The ostensible privacy of family and gender is a particular form of relationship to state power for women, children, and for men. Furthermore, this ostensibly private character is legally constituted.

Nor is the family extra-economic. As political scientist Ann Porter has written, “family and gender dimensions can influence, and form part of, the development of economic structures and class relations.”¹⁴³ As Alice Kessler-Harris has put it, “[t]he idea that some people (generally women) would get benefits by virtue of their family positions and others (mainly men) by virtue of their paid employment” is characteristic of U.S. social policy and the social organization of American capitalism. “In a world infused by irregular work and persistent unemployment, popular opinion had it that the security of the family relied on the regular wages of its head, who was more than likely to be male.”¹⁴⁴ Kessler-Harris adds more generally that what she calls “gendered habits of mind” or “the gendered imagination” have been central to American social order.¹⁴⁵ As part of this gendered imagination, early twentieth century “reform-minded men and women” tended to “imagin[e] all women as mothers, potential mothers, or mothers of the race.”¹⁴⁶

¹⁴³ Ann Porter, *Gendered States: Women, Unemployment Insurance, and the Political Economy of the Welfare State in Canada, 1945-1997* (Toronto: University of Toronto Press, 2003), 16.

¹⁴⁴ Alice Kessler-Harris, *In Pursuit of Equity: Women, Men, and the Quest for Economic Citizenship in 20th-Century America* (New York: Oxford University Press, 2001), 4.

¹⁴⁵ Kessler-Harris, *In Pursuit of Equity*, 5.

¹⁴⁶ Kessler-Harris, *In Pursuit of Equity*, 32.

One result of this perspective is that when examined closely, at least in some settings, the distinctions between family, state, and economy become hard to maintain. As historian Megan Taylor Shockley has put it, “capitalist states construct (...) a masculine norm” and “promote patriarchal family structures” because “the state needs to create stable economic climates and stable families. In this situation women are called upon to provide service work to the state in the form of reproductive labor.”¹⁴⁷ “The state represents more than the formal structures of policymaking power; it extends into all levels of society, including the family.”¹⁴⁸ Shockley refers to families as “the smallest units of the state.”¹⁴⁹

Understood in this light, workmen’s compensation legislation was an attempt by policymakers to intervene in the social life of families, waged work, and markets. Reformers and policymakers who sought to change the governance of employee injury recognized the interconnection of income, gender, and family, and the ramifications for those interconnected institutions. By the early twentieth century, Americans purchased much of what they needed, such that lack of access to money posed a serious problem of quality of life, and perhaps, of survival itself. Business and labor practices by employers created injuries, which interrupted incomes, which cut off much of the flow of needed goods and services to families. With compensation laws, policymakers attempted to provide income to restore that flow of goods and services. They did so in part out of

¹⁴⁷ Megan Taylor Shockley, *We, Too, Are Americans: African American Women in Detroit and Richmond, 1940-1945*, (Urbana: University of Illinois Press, 2003), 3.

¹⁴⁸ Shockley, *We Too Are Americans*, 4.

¹⁴⁹ Shockley, *We Too Are Americans*, 9.

humanitarian concern about suffering, in part because of concerns that without assistance families would break down and thus create disorder in society. They also did so out of a desire to maintain labor markets, because distressed families would be unable to raise future workers. Compensation laws thus aimed to shore up institutions and restore a measure of security and predictability to the gendered political economy of American capitalism. In doing so, they created a new legal (and economic, and gendered) environment for businesses and workers.

In light of the history of women and gender in law, politics, and economy, it should be no surprise that wage-earning women were less well served by compensation laws than men. In 1910, more than half of wage-earning women worked in agriculture and personal services. In 1920 the total of these two categories was almost forty percent of wage-earning women. Compensation laws often excluded domestic and agricultural workers.¹⁵⁰ Thus, a great many women were statutorily outside of workmen's compensation.

¹⁵⁰ Fishback and Kantor, *A Prelude to the Welfare State*, 125, 135. The exclusion of domestics likely resulted from long-standing notions that labors in the home were not 'work', a staple of both patriarchal and middle class values. See Vanessa H. May, *Unprotected Labor: Household Workers, Politics, and Middle-Class Reform in New York, 1870-1940* (Chapel Hill: University of North Carolina Press, 2011); Lara Vapnek, *Breadwinners: Working Women and Economic Independence, 1865-1920* (Champaign, IL: University of Illinois Press 2009); and Jeanne Boydston, *Home and Work*.

*Table 4. Women Employed in Agriculture and Domestic Service*¹⁵¹

	1910		1920	
	Number of women employed	Percent of wage-earning women	Number of women employed	Percent of wage-earning women
Agriculture	1,449,138	19	900,076	11
Personal services	2,635,804	35	2,185,030	27

That said, many women worked in industries where compensation laws did apply. In particular, about twenty percent of wage-earning women, between one and two million women, worked in manufacturing.

*Table 5. Women Employed in Manufacturing*¹⁵²

	1910		1920	
	Number of women employed	Percent of women wage earners	Number of women employed	Percent of women wage earners
Manufacturing	1,336,290	18	1,842,578	23
Retail	777,081	10	1,043,123	13

Women in manufacturing had the same basic right to compensation for their injuries as did men, but the laws built in another form of inequality for these women. The

¹⁵¹ Matthew Sobek, “Major industrial groups of labor force participants – females: 1910–1990.” Table Ba688-705 in *Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition*, edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright, (New York: Cambridge University Press, 2006)

¹⁵² Matthew Sobek, “Major industrial groups of labor force participants – females: 1910–1990.” Table Ba688-705 in *Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition*, edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright, (New York: Cambridge University Press, 2006)

particulars varied by state law, but the general formula for injury compensation under compensation laws was as follows.¹⁵³ Compensation laws set an amount of time that the injured or their families would receive payments, such as one hundred weeks. The laws also set an amount for these payments, or rather, they set a payment rate, such as fifty percent of the injured person's average weekly earnings. This fact is significant for understanding the gendered character of injury compensation under compensation statutes.

¹⁵³ See Witt, *The Accidental Republic*. The first states to enact compensation laws that went into effect were California, Illinois, Kansas, Massachusetts, New Hampshire, New Jersey, Ohio, Washington, and Wisconsin. These states compensated injuries in the following manner. In Washington, a surviving wife received a monthly payment of twenty dollars, plus five dollars per child under sixteen, up to a total of thirty five dollars per month. These payments continued until the wife died or remarried. In Kansas survivors got three times the earnings of the deceased in the preceding year, up to \$3600 and no less than \$1200. Domenico Gagliardo, "First Kansas Workmen's Compensation Law," *Kansas Historical Quarterly*, November 1940 (Vol. 9, No. 4), 384-397. In Ohio survivors got 66% of average weekly wages for up to six years, with a maximum of \$3400 and a minimum of \$1500. *Hearings Before the Employers' Liability and Workmen's Compensation Commission, Part 3* (Washington: Government Printing Office, 1911), 1252. In Massachusetts survivors got payments equal to 50% of the annual wage of the deceased, payable for 300 weeks. "Compensation Act Explained to Local Builders," *The Lowell Sun*, December 7, 1911, 5. In New Jersey survivors got up to 60% of the weekly wage for up to 300 weeks, with a maximum of \$3000. *Hearings Before the Employers' Liability and Workmen's Compensation Commission, Part 3*, 1246. In New Hampshire, survivors got 150 times the average weekly wage of the deceased, up to \$3000. *Hearings Before the Employers' Liability and Workmen's Compensation Commission*, 1251. The Illinois Employers' Liability Commission proposed a workmen's compensation law which compensated the "widow, child or children, or parents, or other lineal heirs to whose support he has contributed within five years previous to his death" an amount equal to three times the average annual salary of the killed person. This sum was not to be less than \$1500 and not to be more than \$3000. If there were no such dependents, employers had to pay \$150 for funeral costs. *Report of the Employers' Liability Commission of the State of Illinois*, 23. In 1911 Illinois adopted a law with the same provision but slightly more generous to the dependents of the deceased - four times the annual salary, up to a maximum of \$5,000 and not less than \$3,000. *Labor Legislation Enacted by the Forty-Seventh General Assembly of Illinois* (Springfield: Illinois State Journal Co., 1911), 73. The compensation act Wisconsin adopted contained the same payment scale as that proposed by the Illinois commission - payments for up to three years, for not less than \$1500 and not more than \$3000. *Public Documents of the State of Connecticut, Volume 1 Part 2* (Hartford: State of Connecticut, 1911), 290. California's law provided survivors with three years of the deceased man's average annual pay, no less than \$1000 and no more than \$5000. *Second Special Report of the Bureau of Labor Statistics: Labor Laws of the State of California* (Sacramento: Superintendent of State Printing, 1911), 75.

Women were regularly paid lower wages than men in this era. Women's weekly earnings in manufacturing in 1914 were about 57% that of men's. This figure fluctuated through 1930 but never went over 62%.¹⁵⁴ The way that compensation laws determined injury payments meant that lower paid workers received lower injury payments. Thus, compensation laws transported the gendered inequality in wages into an inequality of payments in the aftermath of injury, creating gendered disparities in the costs of harm to the bodies and lives of wage earners. Over all, women made up about one fourth of all wage earners in 1900.¹⁵⁵ Thus workmen's compensation laws failed to adequately serve a sizable portion of the American workforce.¹⁵⁶

Elements of the gendered inequality in injury compensation were present in the court-based injury compensation system prior to workmen's compensation laws, but this inequality was offset in an important way. When courts in the pre-workmen's compensation system awarded damages to injury plaintiffs, these awards consisted of two different revenue streams. One component of damage awards in injury lawsuits was the loss in earning capacity. Here courts compensated women less than men, as did workmen's compensation laws. The other component of damage awards was damages for pain and suffering. Women could sometimes receive significantly higher awards for pain and suffering than men. The net result was that damage awards for women in injury

¹⁵⁴ Robert A. Margo, "Female-to-male earnings ratios: 1815–1987." Table Ba4224-4233 in *Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition*, edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright (New York: Cambridge University Press, 2006).

¹⁵⁵ Kessler-Harris, *In Pursuit of Equity*, 25.

¹⁵⁶ Women were not the only people treated in this way. See chapters four and five, below.

lawsuits were not subject to the same structural pressure toward lower awards compared to men. With workmen's compensation laws, on the other hand, wage-earning women received lower awards because of labor market inequality. Analyzing the treatment of wage-earning women in injury law system prior to workmen's compensation throws this gendered differential into greater relief.

Of the 487 employee injury cases that the Minnesota State Supreme Court heard between 1900 and 1913, women were the injured plaintiffs in 16 of these suits.¹⁵⁷ These cases allow a limited window into aspects of the gender of injury law prior to workmen's compensation. The low number of women plaintiffs in these suits suggests limitations on women's access to law, which would fit with women's lower wages. Of these sixteen cases, only one was filed by an injured woman who lost her initial trial; she also lost on appeal. In the other fifteen cases the trial court found for the injured plaintiff and the defendant employer filed an appeal. Defendants were only successful in four of these suits. When trial courts found in favor of injured women wage earners, defendant employers were more likely to lose than to win appeals against these decisions.

Of the sixteen women's lawsuits, ten involved women who lost hands or arms in industrial laundries. Three of these women's injuries went uncompensated. The threat of uncompensated injury is an important component of injury law prior to workmen's

¹⁵⁷ *Thiel v. Kennedy*, 84 N.W. 657 (1901); *Blom v. Yellowstone*, 90 N.W. 397 (1902); *Jensen v. Regan*, 95 N.W. 1126 (1904); *National Biscuit Co. v. Nolan*, 138 F. 6 (1905); *Carlin v. Kennedy*, 106 N.W. 340 (1906); *Ludwig v. Spicer*, 109 N.W. 832 (1906); *Raasch v. Elite Laundry Co.*, 108 N.W. 477 (1906); *Fitzgerald v. International Flax Twine Co.*, 116 N.W. 475 (1908); *Abel v. Hardwood Mfg. Co.*, 120 N.W. 359 (1909); *Dally v. Auxer*, 122 N.W. 1135 (1909); *Gloekner v. Hardwood Mfg. Co.*, 122 N.W. 465 (1909); *Bark v. Dixson*, 131 N.W. 1078 (1911); *McVey v. Mannheimer Bros.*, 129 N.W. 371 (1911); *Mortenson v. Hotel Nicolle Co.*, 136 N.W. 306 (1912); *McInerney v. St. Luke's*, 141 N.W. 837 (1913); *Maki v. St. Luke's*, 122 Minn. 444 (1913).

compensation and should not be underestimated. At the same time, the possibility of higher awards for women is important as well: the other seven women who received compensation in their suits were awarded damages ranging from \$1,500 to \$7,500, with an average award of \$5,000.

Mary McInerny lost her hand to an ironing machine called a mangle. McInerny was paid \$30 per month. After her lawsuit, her employer was ordered to pay \$4,000 in injury damages, equal to about 133 months of pay or just over eleven years.¹⁵⁸

Minnesota's 1913 workmen's compensation law, compensated the loss of a hand with 150 weeks of payments at fifty percent of the injured party's wage, allotting two hundred weeks of payments for the loss of an arm.¹⁵⁹ Under Minnesota's workmen's compensation law, McInerny would have received just over \$1,000. Kathryn Carlin was paid \$6 per week. Her employers were ordered to pay damages of \$7,500, the equivalent to 1250 weeks or 24 years of pay.¹⁶⁰ Under Minnesota's workmen's compensation act, Carlin would have received \$900. Despite these women's lower salaries compared to men, they won higher awards, with a large portion of their awards coming from pain and suffering damages.

The difference in award amounts was not the only difference in the gender dynamics of compensation laws and courts. The main difference came from how the proceedings occurred. Compensation laws provided compensation for all according to a

¹⁵⁸ *McInerny v. St. Luke's*.

¹⁵⁹ "Workmen's Compensation Laws of the United States and Foreign Countries, *Bulletin of the United States Bureau of Labor Statistics*, vol. 126 (Washington: Government Printing Office, 1914), 293.

¹⁶⁰ *Carlin v. Kennedy*.

fixed rate. Court cases required arguments and, crucially, narratives. Historian Barbara

Welke writes that

“[e]vents are not born as legal stories. Rather, law, legal process, and culture combine to provide a structure, a narrative form into which an event must be translated to state a legal claim. Translating an event into a legal action is a form of storytelling. As this process suggests, injury was a fact; it was also a performance.”¹⁶¹

Injured women and their lawyers played on gender norms of the time in their courtroom performances. Women wage-earners and their lawyers could use gender norms and skillful narration to make the most of the changing patchwork of employers’ legal defenses and to open new, temporary, gendered gaps in these defenses. There was no such latitude in the fixed rates of injury compensation under workmen’s compensation laws.

Barbara Welke writes that in their daily lives and in their injury lawsuits, “[m]en suffered from the assumption of ableness” in regard to their bodily integrity. The standard employer defenses in workplace injury cases were another example of this disabling assumption of ableness. In general, alongside the paradoxically disempowering assumption of male independence, “women suffered from social and physical constraints on independence.”¹⁶² Women who brought suits for workplace injury played on these assumptions and constraints, seeking to use the assumption of their dependence and incompetence in the attempt to win their cases. For example, Martha Ludwig’s lawyer, J.W. Pinch, asked Ludwig when she took the stand “Martha, you are the little girl that

¹⁶¹ Barbara Young Welke. *Recasting American Liberty: Gender, Race, Law, and the Railroad Revolution, 1865-1920* (New York and Cambridge: Cambridge University Press, 2001), 235.

¹⁶² Welke, *Recasting American Liberty*, 43.

was hurt in the laundry?”¹⁶³ In his closing argument Pinch referred to Ludwig numerous times as a little girl and referred as well to “her little hand.”¹⁶⁴ He urged the jury not to let “this little girl (...) go out of this court room with nothing and grope her way darkly through to the end of her life with this crippled little hand upon which she has been depending to earn her living.”¹⁶⁵

Pinch said that the “little girls” who ran the mangle hadn’t given “any more thought of the dangers than an animal,” and remarked that “any man that is prudent, and wants to do what is right with his children or any children, when he puts them up against a dangerous” machine would be sure to look after their safety in a way in which he said the laundry owner did not.¹⁶⁶ In his final remarks, Pinch appealed to the jury as literal and metaphorical fathers:

If you want to make people who have charge of your children (if you have any) careful, so that they won’t injure them – your little girls and your little boys, perhaps – I don’t know as you have any that work in these factories, but there are thousands of them in this city – if you want to make people careful and see to it that they protect these little people or the inexperienced – and I say this little girl is a little girl; he talks of her as though she was a mature woman, coming in here with her short little skirts (...) a pretty little thing, as innocent as a babe unborn, almost; couldn’t tell an untruth, wouldn’t tell an untruth, couldn’t tell an untruth if she wanted to; – I say if you want to protect the children of this city, the little girls, the young ladies, if you please, anybody that is inexperienced, put to work by masters in places of dangers – concealed dangers – the way you can do it is by the verdict of the jury. When a man understands and when this community is told by the verdict of the jury that they haven’t any right to treat a child in the way this child was treated, they will learn better.¹⁶⁷

¹⁶³ *Ludwig v. Spicer*, 116; see also 223, 233, 245, 249.

¹⁶⁴ *Ludwig v. Spicer*, 403-429.

¹⁶⁵ *Ludwig v. Spicer*, 404.

¹⁶⁶ *Ludwig v. Spicer*, 412.

¹⁶⁷ *Ludwig v. Spicer*, 428.

Pinch's remarks parallel the gender norms and ideology of family in workmen's compensation laws. Pinch effectively asked the all-male jury to serve as protectors of a vulnerable young "girl" and to adopt at least a limited kind of social vision along the lines of what accident commissions sought to instantiate via compensation laws.¹⁶⁸ The defendant's attorney in *Ludwig v. Spicer* pointed out that Martha Ludwig was

not a little girl, as the plaintiff's counsel says, but a woman. He continued, stressing that she was "a woman eighteen years of age, under the statutes of the State of Minnesota, having attained her majority, having the full rights of her status, being able to contract all kinds of contracts, and a man cannot contract them until he is 21 years of age."¹⁶⁹

But this protest was not enough. The court awarded Ludwig \$5,000 in damages.

The court-based injury law system and workmen's compensation law were two different ways to institutionalize early twentieth century American ideologies of gender and family within workplace injury law. This gender ideology certainly constrained women, but in the pre-workmen's compensation world of injury law, wage-earning women could sometimes use these constraints temporarily to pose claims. In the shift to an insurance-based system of injury law, women lost this claims-making ability. The law also provided no more space for women like Salina Howard and Mamie Robinson to narrate what it meant to lose a family member in an industrial accident.

¹⁶⁸ Chapter one suggested that the primary differences between courts and reformers was that reformers believed all employee accidents should be compensated and that injury should be governed via aggregation, through methods in keeping with what Foucault has called biopolitics. This kind of perspective characterized social liberalism in the early 20th century United States. Pinch's appeal to the jury, however, shows a kind of call for social governance via courts: courts did not think in aggregates but they could still play a role in social governance for the greater good above the outcome of individual disputes.

¹⁶⁹ *Ludwig v. Spicer*, 373-374.

Workmen's compensation laws were an attempt to meet the social liberal goal of securing labor markets and labor reproduction. Businesses, however, supported compensation laws out of their own interests as actors within markets. This tension between the goal of securing aggregate populations and social institutions and the goals of individual firms competing in the market would continue in injury law and in business practice. For a time, however, waged workplaces were sites of medical care, even while they were sites of frequent injury. The next chapter turns to specialists in workplace medicine, industrial physicians.

Samuel Howard, November 13th-15th, 1909.

“A good many dead mules and men,” wrote Samuel Howard in the diary he kept while trapped underground in the Cherry. “It is something fierce to see men and mules lying down all over like that.”

“We are cold, hungry, weak, sick, and everything else.” Howard wrote tersely about what he saw, felt, and tried not to feel. “To keep me from thinking I thought I would write these few lines.”

“14-1909. Alive at 10:30 o’clock yet.” Many of Howard’s diary entries contain only the time and the fact that he was alive. “10.45. 11 sharp.”

“Half past 11. 10 to 12 o’clock. 7 after 1 o’clock. 2 o’clock. 3 o’clock and poor air.”

“7:50 o’clock - thirsty, hungry, and sleep [sic], but I could stand quite a bit of this if I could get out of this hole.”

“25 after 10 a.m. Sunday. Still alive.”

“I think I won’t have the strength to write pretty soon. 15 after 12 p.m. Sunday.”

“14 after 2a.m. Monday. Am still alive.”

“9:15 a.m. Monday morning. Still breathing. Something better turn up soon or we will soon be gone. 11:15 a.m. Still alive at this time.”

Howard’s diary ended, “10 to 1 p.m. Monday. This [sic] lives are going out. I think this is our last. We are getting weak. Alfred Howard as well as all of us.”¹⁷⁰

¹⁷⁰ “Dying Miner’s Diary Details His Fight for Life,” *Chicago Daily Tribune*, November 24, 1909, 4.

Chapter Three. The Rise of the Industrial Physician: Managing Health, Risk, and Commodification

Policymakers changed employee injury law in the attempt to financially secure the reproduction of the U.S. working class. This chapter turns to interventions in social reproduction that occurred in waged workplaces: industrial medicine. Industrial medicine arose in response to concerns over employee health, concerns that overlapped with businesses' financial interests. Like injury law reformers, industrial physicians often discussed working-class people in ways that treated them as commodities and as aggregates. That commodification changed with employers' shifting responses to their legal environment. Over time, employers' health programs increasingly centered on managing uncertain financial dangers produced by changes in law and which companies understood in terms of risk.

In 1904 physicians, social workers, and other concerned individuals formed the National Association for the Study and Prevention of Tuberculosis and in 1906 a similar group formed the Chicago Tuberculosis Institute.¹ Tuberculosis detection efforts helped

¹ On the national association generally, see S. Adolphus Knopf, *A History of the National Tuberculosis Association: The Anti-Tuberculosis Movement in the United States* (New York: National Tuberculosis Association, 1922). On the Chicago group, see Knopf, 19-20. The anti-tuberculosis campaign and other efforts described in this chapter were part of broader changes in the history of public health in the United States, efforts which formed a kind of hinge between public health generally and the rise of industrial medicine. Industrial physicians certainly talked about themselves as contributing to the public good through their efforts. Literature on the history of public health has tended to emphasize epidemics, such as Michael Willrich, *Pox: An American History* (New York; Penguin, 2011) and Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco's Chinatown* (Berkeley: University of California Press, 2001); occupational safety and health, such as Christopher C. Sellers, *Hazards of the Job: From Industrial Disease*

foster the expansion of industrial medicine at several large firms. Through these efforts, physical examinations of individual employees would become a central task of industrial physicians, and expertise at examinations became an important part of how professionals in the field explained their relevance to their employers. In 1912 the Chicago Tuberculosis Institute's Committee on Factories published "A Plan of Examination of Employees for Tuberculosis." The pamphlet argued that for physicians in industry and for the companies employing them "[t]he watchwords should be: education, detection, control." These watchwords would come to extend well beyond the management of tuberculosis.²

to *Environmental Health Science* (Chapel Hill: University of North Carolina Press, 1997) and David Rosner and Gerald Markowitz, eds., *Dying for Work: Workers' Safety and Health in Twentieth-century America* (Bloomington: Indiana University Press, 1987); and the relationship between public health and immigration control, such as Alan Kraut, *Silent Travelers: Germs, Genes, and the Immigrant Menace* (Baltimore: Johns Hopkins University Press, 1995) and Amy L. Fairchild, *Science at the Borders: Immigrant Medical Inspection and the Shaping of the Modern Industrial Labor Force* (Baltimore, Johns Hopkins University Press, 2003). Studies of public health have attended less to the ways in which changes in public health efforts drew upon and also remade employer governance over employees. For work dealing with public health as a specific discipline and area of policy while also reflecting on the larger category of health and its construction by political and economic actors, see Chantel Rodriguez, "Health on the Line: The Politics of Citizenship and the Railroad Bracero Program of World War II," (PhD diss., University of Minnesota, 2013).

² *A Plan of Examination of Employees for Tuberculosis* (Chicago: Committee on Factories of the Chicago Tuberculosis Institute, 1912), 13. Like Progressive Era public health efforts more broadly, factory anti-tuberculosis efforts expressed what historian Daniel Burnstein calls this era's "comprehensive social vision," a vision within which ideas of health played a key role. This social vision manifested in efforts to identify and root out whatever was considered unclean or potentially infectious. Daniel Eli Burnstein, *Next to Godliness: Confronting Dirt and Despair in Progressive Era New York City* (Urbana: University of Illinois Press, 2006), 3. Spreading belief in the scientific theory that bacteria caused illnesses like tuberculosis, cholera, and typhoid fed and changed this emphasis on health. Physicians sought to place themselves in important roles within the world imagined by this social vision, claimed special expertise in that identification of people who carried infectious diseases. Burnstein, 14. Paul Starr argues that physicians saw public health as a potential incursion on their territory. Physicians sought to deal with this incursion by positioning themselves as meeting public health needs, arguing that their expertise was especially important in controlling the spread of disease. Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York: Basic Books, 1982), 183-194. As part of this claim, Starr

On its title page the pamphlet declared the slogans “Efficiency of the worker rests on health as its foundation” and “A system of medical examinations is an essential step in the preservation of health and efficiency of a working force.” In the second slogan, medical examination figured as simultaneously presupposing, practicing, and maintaining the commodification of employees. The body of the pamphlet began with an economic metaphor articulating this same perspective:

Periodic examination of machinery is part of the business policy of all well-managed establishments. Serious damage or even total destruction result from neglect of timely repair. (...) In dealing with “inanimate” machinery, this principle is fully recognized and universally applied as a matter of economy. As a factor in the conservation of “human machinery” the policy of “periodic examination and timely repair” is still in need of fuller recognition and wider application. (...) The worker, the employer and the public are gainers by the operation of a system of examinations rendering possible the timely detection of “breaks” in the health of workers. Periodic medical examinations tend to conservation of health and efficiency of a working force.³

The pamphlet referred to “health as the greatest asset of the worker” and argued that medical examinations, by “draw[ing] the attention of the employer, superintendent or foreman to the health of the individual workers, thus tend[ed] to greater solidarity of interests, and hence greater efficiency of the entire force.”⁴ From this perspective, the right arrangement of market institutions could harmonize the interests of employers and employees, resulting in the best outcome for everyone. This might be termed market humanitarianism, justifying and advocating important changes in social policy and business practice on the basis that these changes would be good for business and thus for

argues that physicians helped shift the emphasis in public health “from the environment to the individual,” which he sees as exemplified by the growth of medical examinations. Starr, 192.

³ *A Plan of Examination of Employees for Tuberculosis*, 5.

⁴ *A Plan of Examination of Employees for Tuberculosis*, 6.

all. Under the right circumstances - circumstances set in part by law - markets and businesses could be counted on to maintain the health of working people.

In its details, the Chicago plan called for existing company doctors to begin to screen for tuberculosis, for larger companies to consider hiring a doctor specifically to carry out this screening, and for companies to hire a nurse who would assist doctors and conduct home visits for workers diagnosed as having tuberculosis or judged as predisposed to tuberculosis due to “poor general condition,” including malnutrition, or with recurring or protracted cough. The plan also called for medical personnel to carry out “continuous supervision” over these employees. The medical examination plan was submitted to the Chicago Tuberculosis Institute in 1911, and in the following year, as a result in part of education provided by industrial physicians, its proposals for the expansion of medical detection and control were adopted at International Harvester; Montgomery, Ward & Company; the Chicago Telephone Company; and Swift & Company. The pamphlet also pointed out that Sears, Roebuck & Company had “for some time given special attention to tuberculosis in their examination of employes [sic].”⁵ In 1919 Harry Mock, by that time an important leader in industrial medicine, would credit anti-tuberculosis work with an important role in the development of industrial medicine. Mock wrote that “[p]rior to 1909 a few state factory inspectors and a few other individuals had called the nation’s attention to the wastage of human life by some of the more flagrant unsanitary conditions in industry.” This led to a number of investigations into workers’ health. “Extending inspection to the employees themselves, by physical

⁵ *A Plan of Examination of Employees for Tuberculosis*, 8.

examinations (...) was one of the greatest advances ever made in health supervision in this country.”⁶ Mock credited his own anti-tuberculosis work at Sears in 1909 and similar efforts around the country with aiding the growth of industrial medicine. Medical examinations for tuberculosis “revealed many other diseases, which, taken in their incipiency, could be checked. This fact, because of its economic basis, became one of the strongest arguments in favor of the physical examination of employees.” As a result, Mock wrote, physical examinations had become “a fixture in many industries” by 1914.⁷ In 1922 the National Industrial Conference Board published *The Physician In Industry*. The NICB described itself as “a co-operative body composed of representatives of national and state industrial associations” which existed in order “to provide a clearinghouse of information, a forum for constructive discussion, and a machinery for co-operative action on matters that vitally affect the industrial development of the nation.”⁸ Its members included the National Association of Manufacturers and the National Industrial Council. The organization thus existed to provide space and resources for the intellectual lives of the people who ran American corporations, in a way that would assist in that running.

In his contribution to *The Physician in Industry*, aimed at both industrial physicians and their employers, physician W. Irving Clark of the Norton Company wrote that “[t]he entire movement toward industrial medicine probably owes its origin to

⁶ Harry E. Mock, *Industrial Medicine and Surgery* (Philadelphia: W.B. Saunders and Company, 1919), 127.

⁷ Mock, *Industrial Medicine and Surgery*, 128.

⁸ National Industrial Conference Board, *The Physician In Industry: A Symposium* (New York: National Industrial Conference Board, 1922), 1.

pulmonary tuberculosis. (...) In Chicago a number of factories, in order to find out the prevalence of the disease in their organizations, instituted physical examinations of the chests of all employees. The facts brought out by the examinations were so important that complete physical examinations followed, and these, coupled with the corrective and follow-up measures, rapidly developed into the art of industrial medicine.”⁹

Anti-tuberculosis work helped create professional networks among some of the doctors who would come to play an important role in the professional-organizational life of industrial medicine, and helped spread an epistemological framework which would inform industrial medicine, as encapsulated in the economic metaphors the Chicago Tuberculosis Institute used. These commodifying metaphors were often strongly technocratic in character, with experts ruling over less expert people who were the object of expert knowledge. In its plan for medical examinations, the Chicago Tuberculosis Institute declared that “[t]he hand of the engineer is on the throttle of the manufacturing machinery; the hand of the physician should be on the health of the working force; a higher standard of health means greater efficiency.”¹⁰ In this imagery working people appear as a factor of production, like machinery. The engineer with his hand on the throttle of machinery partially determined the pace at which a machine will wear out. The

⁹ W. Irving Clark, Jr., “Tuberculosis and Heart Disease Among Industrial Workers,” in *The Physician in Industry: A Symposium*, 42-47.

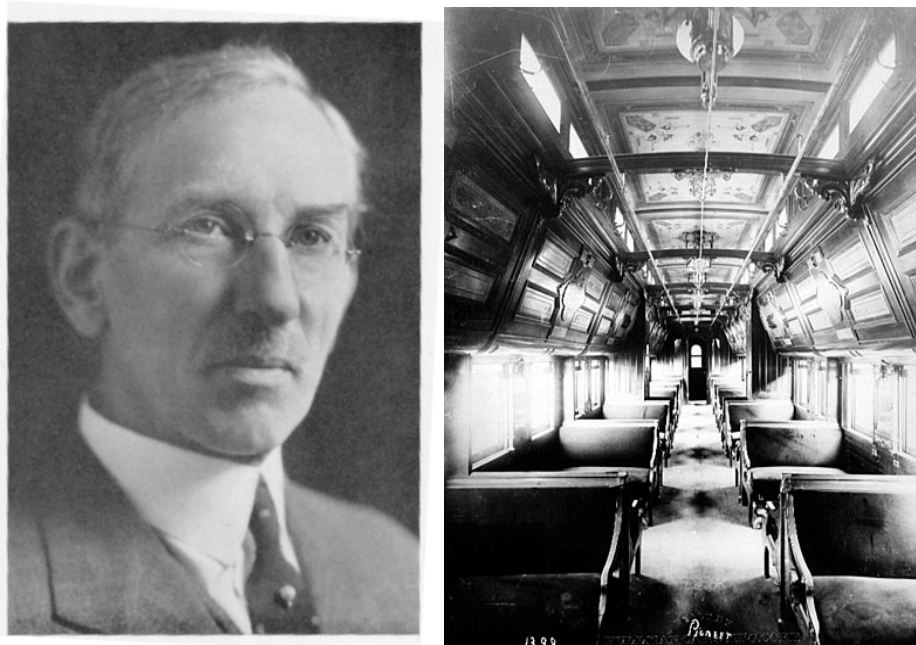
¹⁰ *A Plan of Examination of Employees for Tuberculosis*, 13. This quote recalls Marx’s observation that “experience shows to the intelligent observer how rapidly and firmly capitalist production has seized the vital forces of the people at their very roots.” Marx, *Capital, Volume 1*, 380. Marx’s over-riding concern in this chapter was with the rapidity with which workers were used up in production, with terrible effects on their lives. Marx had much less to say about other ways in which capitalism might grip “the vital forces of the people,” probably because he wrote before many significant developments in industrial medicine and public health.

physician, with his hand on the throttle of the work force, helped determine the same for employees.

In making “education, detection, control” their watchwords, the Chicago Tuberculosis Institute expressed defining components of industrial medicine as a professional field. Education in the field would take the form of physicians educating each other, their superiors in business, and policymakers, in ways that created awareness of the importance of medical detection and control. Detection and control would emerge as key practices in industrial medicine, particularly in the form of conducting medical examinations and in the study of the results of medical examinations in the aggregate. The Chicago Tuberculosis Institute included among its officers George Perkins, an executive at International Harvester with close ties to J.P. Morgan, and Frank Billings, a physician and Rush Medical professor. In 1905, Billings would help Thomas Crowder, a former student and colleague, to secure a job at the Pullman Corporation.¹¹ In doing so, Billings helped begin Crowder’s career in industrial medicine. Crowder would come to play a leading role in the field.

¹¹ *A Plan of Examination of Employees for Tuberculosis*, 15.

Figure 9. Thomas Reid Crowder¹² Figure 10. Interior of a Pullman car¹³



Pullman first hired Crowder to deal with a less medically serious danger than tuberculosis and a danger which did not afflict Pullman employees. Specifically, the company hired Crowder to address public fears that ventilation in Pullman's signature sleeping cars might pose a threat to passenger's health. The company feared that harms to passengers could be a source of financial liability as well as a source of harm to the company's reputation. Crowder spoke at numerous conferences and wrote articles and books on the issue of sleeping car ventilation. Under his watch Pullman introduced new fans and forms of ventilation and temperature control in sleeper cars, and changed the

¹² Photo from "Thomas Reid Crowder, M.D., Honorary Life Member, Conference of State & Provincial Health Authorities of North America, 'One of those Quiet Men who Carry a Heavy Burden and Do It Well,' *Industrial Medicine*, vol. 4, no. 9 (Sept. 1935), no page numbers, no author listed.

¹³ State Historical Society of Wisconsin Visual Archives: Album 36.166, Online, Internet, <http://www.library.wisc.edu/etext/wireader/Images/WER1527.html> accessed February 19, 2014.

bedding in its sleeper cars, adding additional cover layers on sleeping berths in the attempt to minimize contact between successive passengers.¹⁴ The heart of Crowder's work, however, was to argue that there was no serious problem of sleeping car ventilation. In summary, Crowder's solution after studying the matter was that passengers sometimes felt ill aboard sleeping cars because they had become overheated. If a passenger began to feel ill on a sleeping car, they probably just needed to open a window. This is a fairly innocuous episode. The structure of this episode – Crowder being handed a technically defined problem with great freedom to operate but within narrowly defined parameters – would recur several times at Pullman, sometimes in less innocuous ways, as part of changes in the field of industrial medicine and the role the discipline played in American businesses.

After sleeping car ventilation, Pullman would soon face another problem of ventilation and cost, namely occupational health effects of lead paint exposure for Pullman employees. Here the histories of industrial medicine and public health intersected, as both a medical priority and as a matter of law. With sleeping car ventilation, the primary emphasis was on harm that might befall people as a result of Pullman's practice, a cost of the company's operations which the company did not pay for, a cost economists call a negative externality. With sleeping car ventilation, the company responded to the possibilities of negative responses from the market. With the problem of employees' exposure to lead paint, the changes at Pullman were the result of a

¹⁴ John H. White, *The American railroad passenger car, Volume 2* (Baltimore: Johns Hopkins University Press, 1978), 406. See also Thomas R. Crowder, "A Study of the Ventilation of Sleeping Cars," *Journal of the American Public Health Association*, vol. 1, no. 12 (December, 1911): 920-92.

combination of both legislation and potential market or publicity concerns. Pullman officials sought to control lead exposure in part because the law made them do so, and in part because of the threat of negative publicity. Controlling lead exposure facilitated growth in Pullman's medical department and spurred the development of industrial medicine as a risk management practices.¹⁵ The issue of lead paint exposure also marks an important development in the emergence of employees' bodies as a key concern in the company's management of financial uncertainty and of medical examinations as a technique for this management.

In the early 20th century United States, state and federal governments formed numerous commission to study social problems and identify possible policy responses. In keeping with their social liberalism these commissions tended to approach the problem of injury from a biopolitical perspective which thought in terms of aggregates and sought to secure the reproduction of institutions and populations. In 1907 the Illinois legislature formed a commission on occupational diseases. This commission helped bring about an important change in the role of medical knowledge at Pullman.¹⁶ Like the federal Industrial Commission, the Illinois Workingmen's Insurance Commission, and numerous

¹⁵ David Rosner and Gerald Markowitz's *Dying for Work* remains an excellent work on lead paint exposure and much more in the history of occupational safety and health. That history is important for several reasons, including the ways it foregrounds the human effects of business decisions. Those decisions are systematically produced and are predictable in a capitalist society. This dissertation is in a sense connected to the history of occupational safety and health but is primarily a history of how programs intended to secure health actually embodied other priorities than health. For more on lead poisoning, see Christian Warren, *Brush with Death: A Social History of Lead Poisoning* (London: Johns Hopkins University Press, 2000). Warren discusses Pullman briefly (52), noting that immigrant workers did some of the most dangerous work at Pullman, with their employer and their co-workers rarely informing them of the risks.

¹⁶ *Journal of the Senate of the General Assembly, Volume 46*, (Springfield: Illinois State Journal Co., 1911), 1135.

other government bodies, the Occupational Disease Commission took the view that the economy must be protected from the health effects of production, which meant that protecting workers' health was an economic good. The legislation creating the commission declared that "health and safety of the vast army of employes [sic] (...) is of the most vital importance to the general security of the commonwealth." The report continued, saying that workers' health problems were an important cause "of extreme poverty and distress" and "the interruption of the use of costly machinery and other capital." It thus declared that workers "in health are a source of wealth to the nation and the support of dependent families" such that it was "the moral duty of every civilized state to secure and publish information of vital importance to all citizens to promote safety and health, and to foster and regulate insurance against loss of income by accident and disease."¹⁷ The Illinois Occupational Disease Commission thus combined the two basic facets of government risk management that David A. Moss has identified, risk reduction and risk reallocation.¹⁸ Indeed, the Occupational Disease Commission seems to have taken the view that occupational illness could be reduced by reallocating the costs of those illnesses. This line of reasoning held that if employers were made to pay for the illnesses and accidents that resulted from production - that is, if legislation made firms internalize the costs of injury and illness rather than leaving them as negative externalities - then firms would take steps to reduce illness and injury. This effort was

¹⁷ *Journal of the 45th General Assembly of the State of Illinois* (Springfield: Phillips Bros., 1908), 307.

¹⁸ David A. Moss, *When All Else Fails: Government as the Ultimate Risk Manager* (Cambridge: Harvard University Press, 2002), 17-18.

not aimed primarily at alleviating individual circumstances but at providing large-scale security of the economy.

Risk appeared as an explicit term in discussions of occupational health. The Illinois commission issued a detailed report on Illinois industry in 1911, which helped bring about an important change in the role of medical knowledge at Pullman.¹⁹ The 1911 report used a vocabulary of risk to address the problems of employee health, noting that waged work involved “risk of the trade” meaning “a danger to health which still exists in some degree after all known precautions have been taken both by employers and employees.” These risks would only grow over time because “the increased activity and energy of productive enterprise, spurred by competition and by demand for dividends, will in many directions introduce new perils to life and health.” The report continued, noting that the distribution of work-related risk was legally structured. “Under present laws in the United States, this risk is borne chiefly by the injured workmen.”²⁰ The report also noted that while that risk distribution allowed employers to minimize costs for injuries, those costs had to be borne by someone and the system increased total injury costs: “The burden of the diseased, crippled, and disabled workman finally falls on the community.”²¹ The health commission sought to re-allocate these costs of injury in order to secure the reproduction of the working class.

¹⁹ *Journal of the Senate of the General Assembly, Volume 46*, (Springfield: Illinois State Journal Co., 1911), 1135.

²⁰ Commission on Occupational Diseases, *Report of Commission on Occupational Diseases to His Excellency Governor Charles S. Deneen* (Chicago: Warner Printing Company, 1911), 17.

²¹ *Report of Commission on Occupational Diseases*, 19. This redistribution was only financial. For a discussion of the non-financial harms of injury see Barbara Young Welke, “The Cowboy Suit Tragedy: Spreading Risk, Owning Hazard in the Modern American Consumer Economy,” *Journal of American*

University of Chicago sociologist Charles Henderson of the Illinois Workingmen's Insurance Commission served as secretary of this commission. Alice Hamilton, an early leader in the field of occupational health and a social reform advocate, led the Occupational Disease Commission's investigation into health effects of lead. Her portion of the report noted that painting and sanding the ceilings of railway cars such as Pullman's signature luxury cars posed a particularly serious danger to workers due exposure to lead paint dust. Dr. Hamilton was upset by conditions at Pullman, particularly as reflected in the stories told to her in interviews she conducted with individual Pullman employees suffering the effects of lead poisoning. She wrote in her autobiography that after her investigations at Pullman,

as I would pass through Pullman on the train in the course of my journeyings, I would curse it in my soul, picturing what was going on there and realizing how powerless I was to do anything about it. But suddenly I found to my relief that there was a chance to bring about a change. I had poured out my story to Miss [Jane] Addams and she made me repeat it to Mrs. Joseph T. Bowen, one of the first and staunchest friends of Hull-House, and a member of that all-too-small class of wealthy people who feel a direct responsibility toward the sources of their wealth.²²

Hamilton wrote that "the facts were brought to Mrs. Bowen's attention and that made her decide to take up the whole question of accidents and industrial disease among the employes [sic] of this company of which she is a stockholder." Bowen, a reformer and settlement house activist, held many shares of Pullman stock. Bowen used her influence at Pullman to get Hamilton and another investigator access to the company in order to

History vol. 1, no. 1 (June, 2014): 97-121, and Barbara Young Welke, "Owning Hazard: A Tragedy," *UC Irvine Law Review* vol. 1, no. 3 (September, 2011): 693-771.

²² Hamilton, *Exploring the Dangerous Trades*, 158.

document in greater detail the problems of industrial disease and workplace injury at the company. Bowen sent the report to Pullman's president and demanded a meeting. After Bowen threatened to take the matter public, Pullman officials met with her. The company first decided to confirm the findings of Hamilton's report by ordering "a thorough physical examination made of all the men employed in work which exposed them to industrial diseases." These examinations confirmed the Hamilton report's findings and company officials began to take steps to improve conditions at Pullman.²³

In March of 1911 Illinois passed a new law on occupational disease, in direct response to the work of the Occupational Disease Commission. As the Commission's report had suggested, the new law mandated that companies conduct the sorts of medical examinations of employees that Pullman had just begun to conduct. Employers were required to carry out medical examinations of employees at any company where workers came "into direct contact with the poisonous agencies or injurious processes referred to" in the report and examining physicians were to report any positive findings to the Illinois State Board of Health.²⁴ These medical examinations were to be conducted "by a competent licensed physician for the purpose of ascertaining if there exists in any

²³ Alice Hamilton, "What One Stockholder Did," *The Survey*, June 1, 1912, 387-9; Louise de Koven Bowen, *Growing Up With A City* (New York: MacMillan 1926),166-167.

²⁴ "Workers Health Measure Passes," *Chicago Daily Tribune* March 29, 1911, 11. The Illinois Commission report was influential on others states' occupational safety laws and led directly to a federal commission on the matter. As Pullman's manufacturing plants were centered in Illinois these other laws had less effect than the Illinois law, but other manufacturers would have also had to begin physical examinations as a result of similar laws around the country. In an earlier article, "Disease and the Workers" the Chicago Tribune wrote that "[h]umanity and social economy both demand this expenditure." *Chicago Daily Tribune* January 13, 1911, 10.

employee any industrial or occupational disease or illness.”²⁵ The Illinois legislature agreed with this, writing these suggestions into law.

Pullman was the first company to begin complying with the Illinois law. Physician Harold Gibson argued that the people who sanded the ceilings of Pullman cars as part of their painting and decorating engaged in work which was “the most fraught with danger of any of the occupations in which lead is handled.” He noted that between August, 1911 and April, 1912, Pullman reported 73 cases of lead poisoning at its car works, out of a workforce that fluctuated between 300 and 600 men.²⁶ As a result of Bowen and Hamilton’s agitation, the Commission’s report, and the 1911 law, Pullman introduced a number of changes. The company began using a different lead-based paint, on the hope that this would reduce exposure. Pullman supplied employees with large quantities of milk, believed to lessen the chances of lead poisoning.²⁷ The company also supplied respirators and required employees to change clothes before leaving for home in order to reduce family members’ exposure to lead.²⁸ The company instituted a policy of washing up before meals and before clocking out for employees exposed to lead. In fact, this washing up was overseen by company supervisors. As George Price wrote,

at the Pullman Works in Pullman, Illinois, I found a splendid arrangement by which the washing of the hands of the employes during noon time was supervised

²⁵ *Report of Commission on Occupational Diseases*, 158.

²⁶ Harold K. Gibson, M.D., “The Practical Application of the Occupational Disease Act in Illinois,” *Human Engineering*, vol. 2, no. 1, (April, 1912): 157-158. *Human Engineering*’s cover logo showed a square labeled efficiency. Its four sides were labeled loyalty, justice, cooperation, and health. The inside cover read “Human conservation is Industrial Management’s best asset. Human conservation upbuilds the Nation’s life. Human waste in Industry is Mismanagement. Human waste is the offspring of Ignorance.”

²⁷ Lee K. Frankel, Alexander Fleisher, and Laura Seymour, *The Human Factor in Industry* (New York: MacMillan, 1920),144.

²⁸ “Respirators for Painters,” *The Painter and Decorator*, vol. 29, no. 6 (June, 1915), 305.

by a foreman and several assistants who saw that the workmen used the individual soap, basins, and towels supplied to them, and inspect the hands of the employes [sic] when they were on their way to the lunch room. This supervision was especially valuable for workers who handle poisonous materials.²⁹

After the passage of the Illinois occupational disease law, Pullman hired four new doctors whereas it had previously employed only one, making Thomas Crowder into the head of a medical department. This decision was the combined result of both state requirements and market concerns - namely, that Bowen and Hamilton might bring the company bad publicity. In a widely quoted and excerpted article, Dr. Hamilton wrote that Pullman “decided to go beyond the law,” leading to “a very evident feeling of solicitude for the health and safety of the men out at Pullman now.” “It needed,” she declared, “only that the condition should be placed clearly and with a certain insistence before the officials of the company for them to recognize the necessity for changes and proceed to make them.” In Hamilton’s view “the same thing would be true of most large companies.”³⁰ Hamilton implicitly criticized the limits of the law in suggesting that Pullman went above legal requirements, writing that “[i]t would have been difficult to apply the law to the men who sand-papered the interiors of the cars; for the wording of the law is simply that ‘adequate facilities’ shall be provided for carrying off the injurious dust, and there is no accepted device for doing it in work of this character.” The newly hired physicians at Pullman continued to conduct medical examinations of employees exposed to lead, as required by the new occupational disease law. Through these

²⁹ George Moses Price, *The Modern Factory: Safety, Sanitation and Welfare* (New York: John Wiley & Sons, 1914) 322, 324-325.

³⁰ Hamilton, “What One Stockholder Did,” 389.

examinations, the company knew that the changes implemented were effective: there were no recorded cases of lead poisoning from July 1911 to July 1912.³¹

While sleeping car ventilation was a matter of customer safety and lead paint exposure was a matter of employee safety, with regard to both Pullman sought primarily to manage potential dangers that its operations posed for others in its social environment. Over time at Pullman and more broadly, these dangers would be conceptualized in a vocabulary of risk and would come to focus on the costs the dangers might pose to the company. Medical expertise became a tool for Pullman to manage risk and part how the company thought collectively. Medicine became part of how Pullman collected data in order to detect risks and part of how the company made decisions about itself on an ongoing basis to modulate its behavior.

Pullman soon dealt with another problem of managing potential health, in the form of the perceived threat to public health posed by employees who handled food. This problem too was the result of legal requirements and here too medical examinations were the key practical and conceptual tool in the practice of medical detection and control. As Pullman responded to this issue, the company further increased its focus on managing employees as a source of risk, thereby increasing the importance of medical examinations as an ongoing practice to monitor operations.

The late 19th and early 20th century saw a boom in the regulation of food across all levels of the U.S. government. Growing awareness of the possibility of food adulteration

³¹ Factory Investigating Commission, *Second Report of the Factory Investigating Commission, Volume 2* (Albany: J.B. Lyon, 1913), 432.

and other health threats posed by food coupled with consumers' decreased knowledge of the particular foods they purchased from large and anonymous producers led to increased concerns over food safety and purity. The economist Marc Law writes that while "specialization in food production" provided consumers more options in terms of what foods to eat, they "also possessed a smaller information set regarding the attributes of the food items [they] consumed. Because individuals knew less about where their food was from, how it was produced, and what was added to it, they became increasingly suspicious about quality."³²

By the early 1910s, concerns over food safety had expanded beyond issues of food purity and preventing adulteration to include the possibility that handlers might transmit disease to consumers via food. For example, the 1914 municipal code of Johnstown, Pennsylvania, required that any employee who handled "meal food products shall be free from any infectious or contagious disease and shall at all times keep his person and clothing in a clean and sanitary condition."³³ In 1914 the National Civic Federation formed a committee on food safety, calling for inspections of kitchens as well as food service workers.³⁴ By 1915 New York City's sanitary code authorized

³² Marc T. Law, "The Origins of State Pure Food Regulation," *The Journal of Economic History*, vol. 63, no. 4 (December 2003): 1103-1130; 1114. On food regulation in this era, see also Gabriel Kolko, *Triumph of Conservatism: A Reinterpretation of American History, 1900-1916* (New York: The Free Press, 1963), 98-110, Jennifer Jensen Wallach, *How America Eats: A Social History of U.S. Food and Culture* (Lanham: Rowman & Littlefield, 2012), 105-109. For an argument about systemic incentives to adulterate food in liberal capitalism, based on mid-19th century Britain, see Karl Marx, *Capital, Volume 1* (New York: Penguin, 1992), 358-361.

³³ United States Public Health Service, *Municipal Ordinances, Rules, and Regulations Pertaining to Public Health* (Washington: General Printing Office, 1917), 104.

³⁴ "The Food in the Kitchens," *New York Times*, 2/25/1914.

inspections of food handlers.³⁵ In a study on public health, Hamilton wrote that the New York City

bureau of food inspection is empowered to insist upon an examination of any person employed in places where food or drink is handled in order to determine whether he has any communicable disease and to withhold the permit to work in such places if examination is refused. This places at the discretion of the food-inspection department about 5,000 peddlers, 15,000 bakers, 90,000 cooks and waiters, as well as an, as yet, unascertained number of candy makers, milk dealers, butchers, and so on.

State laws soon followed, adding inspection of employees who handled food in addition to the inspection of foodstuffs themselves. By 1923 such inspections of food handlers were mandatory in New York on annual basis.³⁶

Legislation provided a legal requirement that Pullman take steps to reduce the potential that food handlers might pass illness on to the public. Concerns over public responses must have shaped the company's behavior as well. The company operated luxury train cars, including food preparation and serving. As a company operating across the United States, Pullman fell under multiple jurisdictions and the company needed to

³⁵ Food regulation in New York had a great deal to do with the story of Mary Mallon, known more infamously as "Typhoid Mary." In 1907, New York health officials determined that Mary Mallon had infected others with typhoid despite being herself symptom-free. She was an infected carrier of the disease while not herself sick. New York from 1907 to 1911 had between three and thousand cases of typhoid cases per years. Medical authorities estimated that almost half of all typhoid transmission occurred via uninfected carriers like Mallon. Concerns over typhoid informed the creation of new laws. As Judith Leavitt argues, health officials had high hopes for the prospects of reducing food-borne typhoid transmission via medical examinations of food handlers. New York City implemented its program of these medical examinations in 1915, the same year that the city incarcerated Mary Mallon for returning to food preparation. Leavitt argues that the examination program had minimal effect in reducing typhoid transmission and notes that public health officials came to doubt its utility, given its high expense and low efficacy. Judith Walzer Leavitt, *Typhoid Mary: Captive to the Public's Health* (Boston: Beacon Press, 1996), 50-53.

³⁶ Alice Hamilton, "Occupational Disease Clinic of New York City Health Department," *Monthly Review of Labor Statistics*, vol. 1, no.5 (November, 1915), 8. See also Judith Walzer Leavitt, *Typhoid Mary: Captive to the Public's Health* (Boston: Beacon, 1996), 52.

conform to the laws in every state in which it operated food service. In responding to the problems of food service personnel as potential transmitters of disease, Pullman drew on the organizational resources and habits that it had previously developed and expanded those resources. Inspecting food service personnel further extended Pullman's use of physical examinations as a means of risk management. As the company dealt with the perceived threat posed by food handlers in one locale, it developed organizational resources that could be used for other purposes. In addition, as a company with an important tie to individual consumers – that is, as a company with a relatively direct relationship with the public – Pullman officials were concerned about perceptions regarding the public safety of Pullman cars and the health of Pullman staff.

In 1913 Pullman employed approximately 700 food handlers. In May of that year, the company began conducting medical examinations of its employees who provided personal services to passengers in New York.³⁷ The company first required applicants for food handling positions to submit to what Crowder called “a cursory examination which is reasonably effective in weeding out those having infectious diseases.”³⁸ In the reference to ‘weeding out’ people, Crowder expressed that two facets of early 20th century liberal governance converged in inspection of food handlers: medical inspection of food handlers both individualized and aggregated. Medical

³⁷ Reply for Crowder of 7/10/1915 from Rittenhouse, District Superintendent. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

³⁸ Given the brevity of the exam, Crowder added, “[i]t is still possible, however, that those in the early stages of tuberculosis might get by.” “Physical examination of porters, suggestion of District Superintendent Rittenhouse regarding,” July 16, 1913, Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

examinations helped produce a population of food handlers deemed to be safe, and did so by setting up a boundary around that population. Where those excluded from work went was not Pullman's concern.

In the next few years Pullman would expand this program of examinations in response to laws passed around the country. Thomas Crowder wrote in an internal memo in 1915 that "many railroads now make physical examination of their dining car employees at monthly or quarterly intervals. I believe we carry out this procedure only on those operating out of the Pennsylvania Terminal at New York. The subject was up for discussion some two or three years ago." Pullman had not yet enacted

regular examination for all commissary men since in a measure it committed us to a policy which would become expensive if extended to include other men operating on cars. I believe this is a question which must come up to us for a positive decision before a great while if we are to keep abreast of the work of more important railroads in protecting their food supplies from contamination.³⁹

Pullman's medical examination practices received positive attention among government health officials. In July of 1915 the State Food and Drug Commissioner of Indiana, Harry Barnard, wrote to Thomas Crowder asking for information about medical examinations of food handlers at Pullman, saying "I am advised your Company has done more notable work along this line than any other." Barnard quoted "a letter just received from the office of the Surgeon General of the Public Health Service, Washington, D.C., 'Among the corporations the Pullman Company has been making a serious effort to eliminate those infected with venereal diseases from among their train crews, and

³⁹ Crowder to Hungerford, "Subject: Medical examination of Pullman Employees; inquiry regarding, A.G.P.A Grand Trunk Ry. System," May 4, 1915. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

especially those handling food’.” Barnard added, “the medical examination of those who have to do with the food supply is a far more vital need than the suppression of food fraud and I am convinced that the work of the food official of the future will be largely confined to the regulation of the health of employees.”⁴⁰ Public health risk management concerns among medical professionals and state personnel formed one of several factors pushing industrial medicine in the direction of governing waged work and waged workers. Thomas Crowder’s reply to Barnard underscores the link between employer governance and industrial medicine:

the state of Pennsylvania has recently passed a law requiring purveyors of food to carry out semi-annual examinations of employees concerned in its handling. The law provides that when evidence of tuberculosis, venereal disease or other transmissible infections is found that the employee must be held out of service until he has properly recovered. (...) We are, of course, complying with the provisions of this act.”⁴¹

This and similar laws reflected a dramatic change in American food production and consumption. Most Americans by this time got a substantial amount of their food through markets, purchasing both pre-prepared foods and foods prepared in restaurants and, for Pullman’s clientele, aboard dining cars.⁴²

⁴⁰ Letter from Harry Everett Barnard, Ph.D., State Food and Drug Commissioner of Indiana, to Pullman, dated 7/7/1915. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

⁴¹ Crowder to H.E. Barnard of 7/15/1915. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

⁴² Susan Williams, *Food in the United States, 1820s-1890* (Westport: Greenwood, 2006), 6-7; Jennifer Jensen Wallach, *How America Eats: A Social History of U.S. Food and Culture* (Lanham: Rowman & Littlefield, 2012), 90.

By 1915, Pullman conducted examinations every four months of all employees who handled food and drink in New York, about 62 employees on average. As a Pullman official named Rittenhouse wrote, “[i]f one of the men shows a communicable disease, we are so notified on the form [filled out by the examining physician]; such man is held out of service and given treatment (...) not being used again until restored to health sufficiently that [a company physician] can give him a clean bill.” Rittenhouse wrote to Crowder that Pullman needed to “examine all applicants for position of conductor or porter, before they were taken up or vaccinated, so as to see if they were in good physical condition before employment.” This plan was apparently implemented in New York without the action of anyone at Pullman’s headquarters. Rittenhouse wrote that “[t]he plan has worked out splendidly and as a consequence we are not having as many men coming to us with this complaint as we used to and further, we are catching a good many men who have diseases of various sorts, which, when brought out in the examination bars them from employment.” Rittenhouse added that the company would benefit from further expanding its program of medical examinations because doing so “would keep out a good many physical undesirables.”⁴³ By 1922, laws and ordinances in almost all of Pullman’s operational locales required food service employees to be physically examined, and Pullman employed 777 of such employees.⁴⁴

⁴³ Reply for Crowder of 7/10/1915 from Rittenhouse, District Superintendent. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

⁴⁴ Crowder to Hungerford 3/18/1922. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

Pullman's management of risks to customers could take a racist cast. A Pullman official named E.F. Carry wrote in 1922 that "it is desirable for us to develop the status of our colored help, particularly the porters, as regards venereal diseases." Carry anticipated legal change requiring the company to examine car service personnel: "Unquestionably laws will shortly be passed requiring the examination of porters, in addition to those who handle food. I believe that our porters are above the average, but being colored, it is taken for granted that they are in the class that runs 50% to 60% venereal." Carry saw an opportunity for Pullman to practice a marketable form of paternalistic uplift. If the company did not "discharge them or punish them" for venereal disease but rather work "to cure them, so that instead of becoming wrecks, refuges, they will be well men. (...) It will be a great thing for The Pullman Company to make a statement that the percentage of porters having venereal diseases is no greater than the percentage of the venereally diseased in a similar number of white men; and I believe we can prove it."⁴⁵

The creation of an administrative structure and company conceptual categories for risk management provided an organizational basis and experience that would be applied to other forms of managing risks posed by employees, as the company's priorities changed. Pullman had created industrial medicine as an institutional mechanism for treating employees as a source of risk. This management of risk quickly expanded into a concern with excluding other employees. The expansion of medical programs at Pullman meant good things for Thomas Crowder's career, as he came to head the institutional

⁴⁵ E.F. Carry to Hungerford, 9/7/1922. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

home of medical risk management at Pullman. The newspaper in his hometown of Sullivan, Indiana, proudly declared “Tom Crowder Gets Merited Promotion.” As of May, 1915, the *Sullivan Union* reported, after ten years at Pullman, Crowder had become the company’s director of Sanitation and Surgery, and his department was allocated an additional \$15,000 to carry out its work.⁴⁶

Thomas Crowder would eventually come to play an important role in industrial medicine well beyond Pullman. Looking closely at Crowder’s life provides a window into the lives of people in the new profession as it emerged in the early 20th century. Born in 1872, Crowder grew up outside the rural town of Sullivan, Indiana, where his parents had a small farm.⁴⁷ Crowder described himself as having been “frail” as a child, but still assisted with farm work.

As industrial physicians became a more distinct constituency they chafed at what they took to be lack of respect from other medical professionals. This must have particularly bothered Crowder, as early on he seemed poised for an influential and important career in medicine, prior to his transition to the industrial field. Crowder’s medical education came late in a wave of changes in medical education and in the medical profession as a whole in the late 19th century. He graduated from Depauw University in 1890, and got his medical degree from Rush Medical College in 1897, the same medical school his brother and father attended. For the next several years he taught

⁴⁶ *Sullivan Union*, vol. 54, no. 44, (June 2nd, 1915), 1. \$15,000 in 1915 dollars is the equivalent of over \$345,000 in 2013 dollars. U.S. Bureau of Labor Statistics, CPI Inflation Calculator, Online, Internet, http://www.bls.gov/data/inflation_calculator.htm accessed 2/19/2014.

⁴⁷ Thomas Crowder, “To Alice and Doodie and Tommy,” May 6, 1926. Cornelia Meigs Papers, Rauner Special Collections Library, Dartmouth College.

at Rush and worked at Cook County Hospital in Chicago. Sara Sliter-Hays has referred to the changes in this era as a combination of “professionalization” including “higher admission standards for medical school [and] more rigorous medical school curriculum” as well as “*scientization* of medical practice” including “a thorough knowledge of anatomy, physiology, and biochemistry; and, most importantly, being *objective*.”⁴⁸ Rush Medical College’s part of these changes included the opening of a new laboratory in 1893, lengthening the time to degree completion in the 1890s, and becoming officially affiliated with the recently founded University of Chicago in 1898. The cultural authority of medicine increased during this period.⁴⁹ In his 1909 report on medical education, Abraham Flexner referred to Chicago as “the plague spot in the country” when it came to medical education.⁵⁰ As such, it is not high praise to say that Flexner gave Rush strong marks. Still, it is worth noting that Flexner said that Rush was one of three Chicago medical schools that should not be closed and he referred to Rush as a “high standard” school.⁵¹ While at Rush, Crowder would work in a laboratory and department run by Ludvig Hektoen, a physician known for his scientific advances.⁵²

The late 19th and early 20th century were years of important change in the medical professions over all. Medical historian Edward Shorter considers the 1880s the beginning

⁴⁸ Sara Sliter-Hays, “Narratives and Rhetoric: Persuasion in Doctors’ Writing about the Summer Complaint, 1883-1939,” PhD dissertation, University of Texas at Austin, 2008, 377.

⁴⁹ On the rising cultural authority of medicine in the United States, see Paul Starr, *The Social Transformation of American Medicine*, 5-29.

⁵⁰ Abraham Flexner, *Medical Education in the United States and Canada* (New York: Carnegie Foundation, 1910), 216.

⁵¹ Flexner, *Medical Education*, 136. For more on Flexner and the impact of the Flexner report, see Ira Rutkow, *Seeking the Cure: A History of Medicine in America* (New York: Scribner, 2010), 147-172.

⁵² Martin Fischer, *Martin B. Wherry: Bacteriologist* (Springfield: Thomas, 1938), 35.

of what he calls “the rise of the modern doctor.” In this period the cultural authority of physicians rose, along with tension and competition over rank and status within the profession as well as conflict over boundary setting: who and what was medical in the first place, and so got to partake of the increased standing of the medical field.⁵³ As medical historian Ira Rutkow has put it, by the late 19th century “American medicine had become a shifting patchwork of overlapping factions.”⁵⁴ Some factions were both higher status and had a more profound shaping and controlling role in this shifting patchwork.⁵⁵

After graduating from medical school in 1897, Crowder interned for a year and a half at Cook County Hospital in Chicago. According to historian Charles Rosenberg, in this period hospital experience came to be viewed as central to the training and qualification of physicians, so that “despite the long hours, the deferral of marriage, and the lack of substantial compensation, an ever-increasing number of young men sought those opportunities” for work in hospitals. “A gradual upgrading in levels of aspiration and education made them anxious to spend a year or more on a hospital house staff.”⁵⁶ Rosenberg also writes that there was growing “desire for academic achievement” and

⁵³ Edward Shorter, *Bedside Manners: The Troubled History of Doctors and Patients* (New York: Simon and Schuster, 1985), 75-106.

⁵⁴ Rutkow, *Seeking the Cure*, 113.

⁵⁵ Rutkow briefly describes the growth of railroad medicine as a specialty and railroad physicians as a constituency. The dynamics Rutkow describes parallel industrial medicine, though there were important differences as well. Railroad physicians worked within larger parent companies, responded to decisions from management, lacked the autonomy that general practitioners had as well as lacking the respect of the broader medical profession. Railway physicians formed the National Association of Railway Surgeons in 1888. By 1920 that association had effectively collapsed, however, and railway medicine became a significantly less important field. Railroad medicine seems to have been a precursor that came to operate in parallel to early industrial medicine rather than having a significant influence on the field. See Rutkow, *Seeking the Cure*, 106-112.

⁵⁶ Charles Rosenberg, *The Care of Strangers: The Rise of America's Hospital System* (New York: Basic Books, 1987), 184.

status among the medical profession in this era.⁵⁷ Crowder's work at Cook County Hospital helped make him a well-qualified physician. His next positions, from 1901-1905, as a fellow in the study of pathology at Rush and as a medical instructor at Rush were both high-status positions for an early career.⁵⁸

In 1902-1903, while a fellow at Rush, Crowder studied in Vienna, Austria, where Crowder developed a specialization in genito-urinary medicine.⁵⁹ Here too Crowder took part in and seemed to succeed in new conditions in medicine in the United States. Charles Rosenberg argues that until the late 19th century American physicians were predominantly general practitioners, and general practitioners had the most status in the field, with some exceptions in urban areas. In the late 19th century, however, American doctors began to specialize further, tied to their rising interest in being scientific and achieving academic accolades. Younger American doctors looked to Germany as a center of specialization in medicine, and as a center of medical expertise grounded in a sense of being scientific. Rosenberg writes that "German styles of training and practice were not transferred intact across the Atlantic, but the ideological prestige of science and systematic clinical investigation were." At the same time, Rosenberg notes, the rise of medical specialization and scientific expertise "exemplified and exacerbated a more general tendency toward the reductionist and technological."⁶⁰ As Ira Rutkow, put it, "[g]eneralists regarded themselves as compassionate bedside clinicians and viewed

⁵⁷ Rosenberg, *The Care of Strangers*, 171.

⁵⁸ DePauw University, *Alumnal Record* (Greencastle: Depauw University, 1915), 204.

⁵⁹ Henry B. Selleck and Alfred H. Whittaker, *Occupational Health in America* (Detroit: Wayne State University, 1962), 134.

⁶⁰ Rosenberg, *The Care of Strangers*, 174.

specialists as aloof technicians, more interested in the wizardry of science than the art of healing.”⁶¹ This technical approach to medicine may have carried forward into some of Crowder’s later career and into the field of industrial medicine generally; the discipline could be described as treating labor markets and companies’ work forces as objects to be handled in a technical fashion based on directives handed down from management.

While in Vienna, Crowder met another physician named Edith Cadwallader. The two returned the United States in 1903 and were married in November of 1905.⁶² Upon returning to the United States, with his teaching and fellow position at Rush, his recent German education, and his new specialization, Crowder was well placed to pursue a promising medical career. One portion of the medical field would soon orient more toward research and the academy. This portion would play important leadership roles and hold high status in the field. At the same time, hospitals grew even more important for doctors as sources of status within the profession, status of the profession in society, and as institutions for healthcare delivery. At Rush and Cook County Crowder had access to both of these aspects of the profession, but he would soon leave both academic and hospital medicine to pursue medicine in industry.

Thomas Crowder did not set out to be an industrial physician. He had intended to follow the family profession and become a doctor like his brother, father, and grandfather. A profile of Crowder published late in his career declared that he “wanted to

⁶¹ Rutkow, *Seeking the Cure*, 106.

⁶² “Thomas Crowder Married,” *Sullivan Union*, November 1, 1905, 5. Depauw University, *Alumnal Record*. “In Memoriam: Edith Warner Cadwallader Crowder,” *Women’s Medical Journal*, vol. 16, no. 3, (March, 1907), 244.

be an internist” in keeping with the family tradition. The article said that Crowder “did not go very willingly” out of internal medicine and into industrial medicine. Crowder “love[d] his work, and he did not want to leave it.” He left internal medicine due to “an infirmity – a disability of hearing, which made even auscultation difficult.”⁶³ One colleague said that Crowder “was seriously handicapped by deafness, but he could always hear the voice of a patient in distress.”⁶⁴ Another colleague, J.S. Felton, said that Crowder was quiet in social interaction, “possibly because of some deafness-related shyness and withdrawal.” His hearing impairment meant that “oral communication was difficult [for Crowder], but he did express himself well in writing.” Felton said that Crowder’s hearing impairment was the reason that he stopped practicing internal medicine and began to work at Pullman, adding that “[f]ew ever discussed Dr. Crowder’s loss of hearing with him, and his associates usually faced him during conversation. It is believed that he had some skill in lip-reading, and at professional meetings sat in the front row. Many electronic hearing aids were tried; in the late thirties and early forties, he wore one powered by rather cumbersome dry-cell batteries. As the years went by, he wore his compensating device less and less.”⁶⁵ In a story he wrote for his children in 1926, in which he described some events in his own childhood, Crowder related hearing a dog

⁶³ “Thomas Reid Crowder, M.D., Honorary Life Member, Conference of State & Provincial Health Authorities of North America, ‘One of those Quiet Men who Carry a Heavy Burden and Do It Well,’ *Industrial Medicine*, vol. 4, no. 9 (Sept. 1935), no page numbers, no author listed. Auscultation means listening to the body.

⁶⁴ Selleck and Whittaker, *Occupational Health in America*, 193.

⁶⁵ J.S. Felton, “Thomas R. Crowder, M.D. Retrospection in Environmental Health,” *Journal of Occupational Medicine*, vol 8, no. 7 (July, 1966):377-82, 378-379. I have been unable to locate any explanation for Crowder’s hearing loss.

bark and gave no indication of childhood hearing impairment.⁶⁶ Whether congenital or acquired, it seems clear that Crowder did not like to discuss his impairment and that he was able to succeed as an industrial physician despite this impairment. The fact that the discipline of internal medicine did not allow Crowder employment as a result of his impaired hearing compelled Crowder to his career in industrial medicine. Tragically, on August 12th of 1906, Edith passed away, shortly after Crowder began his career in industrial medicine.⁶⁷

In the early years, industrial physicians like Crowder did not have very many professional peers engaged in the same sort of work that they did. Alice Hamilton said that in the early days of her career, in the early twentieth century, with very few exceptions “there were no medical men in the State of Illinois who specialized in the field of industrial medicine.”⁶⁸ Even by 1919, after industrial medicine was developing as a field, there were only about 100 physicians in Illinois known to specialize in industrial

⁶⁶ Thomas Crowder, “To Alice and Doodie and Tommy,” May 6, 1926.

⁶⁷ *Sullivan Daily Times*, August 18, 1906, 1.

⁶⁸ Quoted in Jacqueline Karnell Corn, *Response to Occupational Health Hazards: A Historical Perspective* (New York: Van Nostrand Reinhold, 1992). For a compressed but useful overview of concern with occupational health and safety in the medical field and in public policy prior from 1900 to 1935, see Corn, *Response to Occupational Health Hazards*, 2-11. The rest of her book focuses on occupational health from 1935-1990. See also Odin W. Anderson, *Health Services in the United States: A Growth Enterprise Since 1875* (Ann Arbor: Health Administration Press, 1985), 1-112; Alan Derickson *Workers Health, Workers Democracy: The Western Miners’ Struggle, 1891-1925*; Jacqueline Corn, *Environment and Health in Nineteenth Century America: Two Case Studies*; Jacqueline Corn, *Protecting the Health of Workers: The American Conference of Governmental Industrial Hygienists, 1938-1988* (Cincinnati: American Conference of Government Industrial Hygienists, 1989); Rosner and Markowitz, *Dying for Work and Deadly Dust: Silicosis and the Politics of Occupational Disease in Twentieth-Century America* (Princeton: Princeton University Press, 1994) and “A Gift of God: The Public Health Controversy over Leaded Gasoline During the 1920s,” *Am. J. Pub. Health* 75(4):344-252; Sellers, “The Public Health Service’s Office of Industrial Hygiene and the Transformation of Industrial Medicine”, *Bulletin of the History of Medicine* 65(1): 42-73. See also Mock, *Industrial Medicine and Surgery*, 125-132 for an overviews of the field’s early development.

medicine, the vast majority of them in Chicago. Some worked for multiple companies “but the usual practice is for the industrial physician to take employment with only one large establishment and here he usually has the assistance of from one to three physicians.” The field is relatively new and “by no means standardized” yet.⁶⁹ One hundred doctors is a small number, but each member might be responsible for a great many employees. In 1922 the Conference Board of Physicians in Industry had a membership of 29, but those 29 doctors were “responsible for the care of about 400,000 workers in varied industries.”⁷⁰

The handful of doctors who worked in industrial medicine did not often feel respected by other doctors. As Alice Hamilton put it, “For a surgeon or physician to accept a position with a manufacturing company was to earn the contempt of his colleagues.”⁷¹ The disrespect of other doctors may have been in part because industrial physicians seemed to be siding with the opponents of medical professionals. As sociologist Paul Starr has put it, at the end of the 19th century doctors felt threatened by competitors including “company medical plans” and other “bureaucratically organized alternatives to” the prevailing institutional form of medical care, “independent solo practice.” This “represented a threat not only to [physicians’] incomes, but also to their status and autonomy.”⁷² Industrial physicians may have appeared to other doctors as part of the problem. Starr argues that the medical profession developed greater economic

⁶⁹ Health Insurance Commission of the State of Illinois, *Report of the Health Insurance Commission of the State of Illinois* (Springfield: Illinois State Journal Co., 1919), 74.

⁷⁰ National Industrial Conference Board, *The Physician In Industry*, 3.

⁷¹ Selleck and Alfred H. Whittaker, *Occupational Health in America*, 59.

⁷² Starr, *The Social Transformation of American Medicine*, 22.

power because doctors largely sold “services primarily to individual patients rather than organizations. (...)The medical profession (...) insisted that salaried arrangements violated the integrity of the private doctor-patient relationship, and in the early decades of the twentieth century, doctors were able to use their growing market power to escape the threat of bureaucratic control and to preserve their own autonomy.”⁷³ This was not the experience of industrial physicians, helping create the disconnect between them and the rest of the medical profession. Being enmeshed within corporate bureaucracy likely increased their desire to associate, for the sake of advocating for their interests and for professional camaraderie.

The relatively low respect of the rest of the medical profession likely bothered Thomas Crowder, as someone from a medical family, who attended college and a good medical school, studied in that international center of medical expertise, Vienna, and taught medicine. This lack of respect also partly explains the turn toward organization building among industrial physicians in the 1910s. One group of physicians formed the small Conference Board of Physicians in Industry under the auspices of the manufacturers’ association, the National Industrial Conference Board. Another group formed the larger and more independent American Association of Industrial Physicians and Surgeons. These associations no doubt helped industrial physicians achieve a greater measure of status and legitimacy in their own eyes, as well as to attempt to raise the status of their field within the rest of the medical profession as well as with the manufacturers who employed the industrial physicians. Associations also provided

⁷³ Starr, *The Social Transformation of American Medicine*, 24.

industrial physicians with a community of professionals with whom to have intellectual conversations and to assist each other with career goals and challenges. In the mid 1910s, Crowder threw himself into the work of helping organize the fledgling discipline of industrial medicine.

In 1914 Crowder attended a meeting convened by Harry Mock, the medical director at Sears, Roebuck, & Company. Mock, who had been part of anti-tuberculosis work at Sears since 1909 and had played a role in the Chicago Tuberculosis Institute, called a meeting of industrial physicians at Chicago area companies like People's Gas Light and Coke, the Avery Company, the Crane Company, and International Harvester, in order to discuss forming a professional association. The meeting constituted itself as an organizing committee which set about contacting doctors around the country, quickly garnering support from doctors at the Packard Motor Company, B.F. Goodrich, Bethlehem Steel, the NY Telephone Company, the Norton Company, and Ford.⁷⁴ In 1915, with the help of the Illinois Manufacturers Association, this group held a larger meeting to found an association, and incorporated itself officially. The Incorporating Committee of the fledgling American Association of Industrial Physicians and Surgeons (AAIPS) announced itself publicly at the first meetings of the National Safety Council's Health Service Section in October, 1915, inviting all industrial physicians to attend the first annual meeting of the AAIPS, to be held in conjunction with the American Medical Association's first meeting, in June 1916 in Detroit.⁷⁵

⁷⁴ Selleck and Whittaker, *Occupational Health in America*, 64.

⁷⁵ Selleck and Whittaker, *Occupational Health in America*, 68.

Thomas Crowder was “familiar with every step in the preorganization thinking of the Chicago group,” including drafting the final version of the AAIPS’s constitution.⁷⁶ He would go on to serve the organization in many ways, including sitting on the board of directors, editing the publications “Health in Industry” and “The Nation’s Health,” and holding the Association’s presidency. During these same years in which Crowder helped form the AAIPS both of his parents would pass away as well; his father in 1910 and his mother in 1916.⁷⁷

No list remains of the attendees of the AAIPS’s first conference or its founding members but by 1917 the organization had 225 members, climbing to 275 in 1918 and 340 in 1919.⁷⁸ The physicians who joined probably did so for the same motivations driving the conference organizers, including a need to articulate to themselves, other physicians, and their employers in industry what it was that they did and why it was a worthy pursuit. As Harry Mock put it, the AAIPS “represent[ed] the men now engaged to a more or less extent in the practice of an entirely new specialty.” The AAIPS existed for these new specialists to formulate and advocate for their interests, within the medical profession and within industry.⁷⁹

Industrial physicians’ drive to associate also drew upon patterns of behavior in the rest of the medical profession and in the history of professionalism more broadly in the United States. As Paul Starr put it, a key component of the authority of “[d]octors and

⁷⁶ Selleck and Whittaker, *Occupational Health in America*, 64.

⁷⁷ *Sullivan Union* January 26, 1910, 1; *Sullivan County Democrat*, February 24, 1916, 8.

⁷⁸ Selleck and Whittaker, *Occupational Health in America*, 73-74, 83.

⁷⁹ Harry Mock, “Industrial Medicine and Surgery: The New Specialty,” *Transactions of Section on Preventive Medicine and Public Health* (Chicago: American Medical Association Press, 1916), 64.

other professionals” is their membership in and, whether tacit or explicit, invocation of “a community that has objectively validated their competence.” Thus the judgments of a professional are “representative of a community of shared standards (...) presumed to be [based on] rational inquiry and empirical evidence.” Medical professionals gained additional authority by their field’s “orientation to specific, substantive values,” like health.⁸⁰ In forming associations specifically as industrial physicians, doctors like Crowder sought to create a similar shared community of values, standards, and authority.

Starr describes authority as having two main sources, “legitimacy and dependence. The former rests on the subordinates’ acceptance of the claim that they should obey; the latter on their estimate of the foul consequences that will befall them if they do not.”⁸¹ The relative authority of industrial physicians in relation to their employers relied on claims to legitimacy. That is to say, industrial physicians as professionals could convince, persuade, recommend, and request, but could rarely give orders. Industrial physicians thus had, or rather, sought to have and to keep, what Starr calls cultural authority, the ability to make claims and have them be believed true or valid more often than not.⁸² When they succeeded, they could have some measure of what Starr calls social authority – the ability to give orders which are followed more often than not – with regard to employees under them in the corporate hierarchy, but they had little decision-making and order-giving power over others in corporate bureaucracies.

⁸⁰ Starr, *The Social Transformation of American Medicine*, 12.

⁸¹ Starr, *The Social Transformation of American Medicine*, 9-10.

⁸² Starr, *The Social Transformation of American Medicine*, 11-14.

For the early practitioners, industrial medicine would have been a transition toward a very different use of medical knowledge, without much guidance, as Thomas Crowder's experience illustrates. Late in his career he said that when he first started at Pullman "they gave me a little office and a great hell of a stack of papers" regarding various state regulations of railroads, a stack that he found hard to make sense of.⁸³ This was not the kind of knowledge he had mastered in medical school. In addition to the specifics of having to learn about state regulations and about the science of sleeping car ventilation when his training was in internal medicine, his new work involved a change at a basic conceptual level. Previously Crowder had been trained to act on individual bodies of patients. The problem of sleeping car ventilation turned Crowder's career toward problems of medical uncertainty for groups. Crowder became someone who worked in aggregates and with statistical reasoning. To quote another industrial physician, Robert Legge, "The scope of application of industrial medicine is to the larger group as a unit and it is in this relation that the main endeavors are directed."⁸⁴ Like other industrial physicians, particularly those who moved into administrative and supervisory roles, as opposed to those who primarily conducted medical examinations and first aid, Crowder's intellect and expertise came to focus on aggregated bodies: the collective body of the workforce as a whole, and the financial well-being of the body of the corporation.

In the early years of the organized existence of industrial medicine, many industrial physicians wrote and spoke on key questions facing the field. These often

⁸³ "Thomas Reid Crowder, M.D., Honorary Life Member, *Industrial Medicine*, vol. 4, no. 9 (Sept. 1935).

⁸⁴ Robert Legge, "Industrial Medicine," *California State Journal of Medicine* vol. 19, no. 2 (February, 1921), 64.

included core questions of defining and justifying their field, as well as discussing the qualities required of industrial physicians and the contributions the field had to offer. Dr. F. L. Rector of the Conference Board of Industrial Physicians wrote about what made industrial physicians distinctive, saying that “many of the qualifications for successful medical work in industry are of a non-medical nature, and call for knowledge of the laws of social and industrial economics and of administrative problems.”⁸⁵ Harry Mock similarly wrote that “the company surgeon gradually awakens to the fact that he has become a sociologist as well as a physician,” a specialist “in the great medicosociological problems which are confronting this country more and more.”⁸⁶

C.C. Burlingame described early industrial physicians as having a collective identity crisis, trying to define who they were and finding unsatisfactory answers from employers, the rest of the medical profession, and society at large. “What is an industrial physician?” Burlingame asked. “Is he a specialist in medicine or surgery in the same sense that the eye, ear, nose and throat man is a specialist, or the traumatic man is a specialist? He certainly has not been able to convince the medical profession.” Burlingame added, “rightly so (...) we can safely dismiss from our minds the claim of the physician in industry to being a specialist because of any peculiar medical knowledge.” That did not mean there were no particulars to industrial medicine. Rather, what was different was “chiefly, if not exclusively, the non-medical things. (...) our claim to recognition as a distinctive group of people serving society lay in (...) in addition to

⁸⁵ F.L. Rector, “Physical Examinations in Industry,” *Monthly Labor Review* (April 1926): 18-23, 18.

⁸⁶ Harry Mock, “Industrial Medicine and Surgery: The New Specialty,” 66.

medical and surgical knowledge, first, a working appreciation of the economic, the administrative, and the social responsibilities and problems of industry; and second, the ability to make sound applications of modern principles of hygiene and sanitation.” Lack of these two kinds of knowledge “made it impossible for the general practitioner or the outside specialist to do the industrial physician’s job as effectively as he himself was able to do it.”⁸⁷

John B. Moorhead summarized the work of the professional organizations of industrial physicians as an initial concern with standardizing first aid measures followed by “a standardized form of pre-employment physical examination.”⁸⁸ As the field grew, medical examinations loomed larger and larger in the field, and in the reasons for which employers hired industrial physicians, driven by both legal and market concerns. In his 1922 article defining the “Specialized Professional Knowledge” central to industrial medicine, C.C. Burlingame listed first of all “[t]he technique of industrial physical examination.”⁸⁹ In turn, some industrial physicians, particularly those who led the field and led corporate medical departments, began to move toward a concern with aggregates: statistical data resulting from physical examinations. “[O]nce physical examinations have been introduced and adequate care given in accident cases, much larger problems and much larger possibilities have been revealed in connection with sickness and physical defects. The result has been that in a considerable number of instances the work has been

⁸⁷ C.C. Burlingame, “The Physician in Industry” in National Industrial Conference Board, *The Physician In Industry*, 5.

⁸⁸ John B. Moorhead’s introduction to National Industrial Conference Board, *The Physician In Industry*, 1.

⁸⁹ Burlingame, “The Physician in Industry,” 6.

reorganized and extended to disabilities in general, however sustained.”⁹⁰ With physical examinations in particular industrial physicians moved beyond dealing with the aftermath of injury, moving toward risk management and the production of knowledge with which companies could steer their operations. The foreword to the Conference Board of Industrial Physicians’ “Symposium” said that “[t]he introduction of the physician into the industrial organization [was] often made during periods of stress or to comply with legislative enactments, adding that the physician who began working in industry gained “a broader view of his social obligations and of the value of his services in creating and maintaining better living and working conditions among large numbers of persons of a fairly uniform social standing.”⁹¹ Again, the industrial physician worked in aggregates, under conditions created by law.

In the early days of industrial medicine, companies had not standardized where in the corporate hierarchy their medical departments were placed. In a 1924 study, Clarence Selby, industrial physician at the National Malleable Castings Company, surveyed 155 corporate medical departments. He found that medical departments were increasingly becoming incorporated into businesses’ personnel departments but there was still great diversity in the placements for medical personnel. Medical officers always answered to someone, but their direct superior might be a production manager, an officer in charge of

⁹⁰ Health Insurance Commission of the State of Illinois, *Report of the Health Insurance Commission of the State of Illinois*, 74-75.

⁹¹ *The Physician in Industry: A Symposium*, 1.

injury compensation, a general administrator, or an employment or labor relations officer.⁹²

As they formed their associations, industrial physicians issued an outpouring of writing. They sought simultaneously to define themselves as an independent constituency and to define the substance and importance of their work to their employers. In doing so they also implicitly defined industrial workers and their relationship to them, through a series of economic metaphors. Throughout these metaphors, working people appear as passive objects of the medical subject. This is apparent in the imagery from the Chicago Tuberculosis Institute's 1912 pamphlet on factory examinations, which declared that "[t]he hand of the engineer is on the throttle of the manufacturing machinery; the hand of the physician should be on the health of the working force." As is also apparent in this example, these metaphors often drew on economic and business imagery and treated working class people as commodities. In their use of these kinds of metaphors industrial physicians drew from, and in doing so, contributed to, a reservoir of rhetoric among early 20th century professionals, business personnel, and intellectuals. For example, at the Joseph and Feiss Company, and Ohio clothing manufacturer, the Service Department, which ran the company's welfare programs, was organized around recognition that "the stability of the organization is the most valuable asset of a firm, [and so] the chief

⁹² Clarence Selby, "Industrial Medical Service," in George Kober and Emery Hayhurst, eds., *Industrial Health* (Philadelphia: P. Blakiston's Son and Company, 1924), 114-135, 132.

concern of the service department is so to control the physical and moral well-being of the employees.”⁹³

In 1919 Harry Mock argued that “modern industrial concerns have employed experts to study their expensive, complicated machines, in order to preserve their mechanism and obtain their maximum efficiency” but these companies neglected “[t]he human machine.” Over time, companies began to pay more attention to workers’ health, something of “mutual benefit to employee and employer” and which “marked the birth of an entirely new economic point of view which is rapidly extending to every branch of our American industrial life.”⁹⁴ Mock celebrated growing attention to workers’ health while noting that there was more work to be done: “Conservation of man power with maximum production is the battle cry of the country. The adoption of Industrial Health Services by every industry is the answer.”⁹⁵

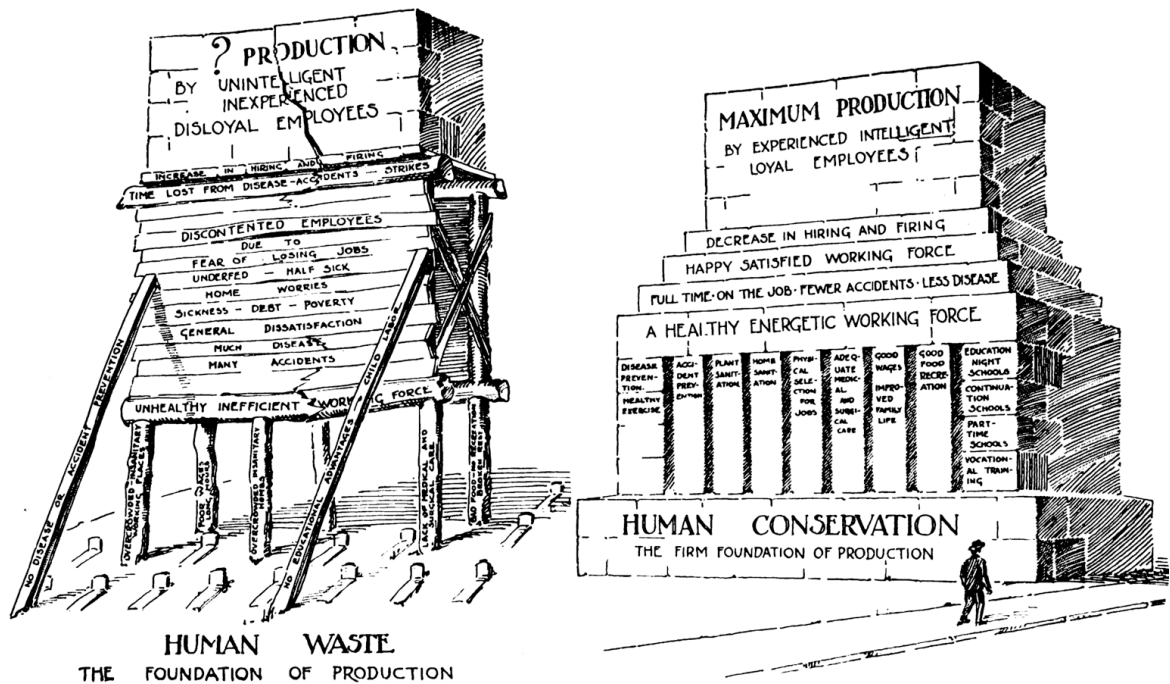
Mock’s 1919 book *Industrial Medicine and Surgery* opened with an image labeled “Human Waste the Foundation of Production,” consisted of two structures, representing the importance of industrial medicine to the economy.

⁹³ Untitled document, October 17, 1914, The Joseph and Feiss Company Records, Con. 4. Folder 9. Labor and home conditions of employees, 1913-1924, Western Reserve Historical Society, Cleveland.

⁹⁴ Harry Mock, *Industrial Medicine and Surgery*, 64.

⁹⁵ Mock, *Industrial Medicine and Surgery*, 132.

Figure 11. Human Waste the Foundation of Production⁹⁶



The image represented simultaneously the progress made due to industrial medicine and the choice facing those employers who had not yet sufficiently supported the field. The structure at the left was a cracked and precarious affair of wood. One of the wooden stilts at the bottom read, “lack of medical and surgical care,” holding up the first level, “Unhealthy Inefficient Working Force.” Above that sat a stack of wood planks listing social ills like “Discontented Employees” and “Time Lost From Disease-Accidents-Strikes.” At the top sat a fractured block reading “Production By Unintelligent Inexperienced Disloyal Employees.” Below this structure sat over a dozen small graves. On the right, a modern stone building towered above a lone man. Across the bottom of

⁹⁶ Mock, *Industrial Medicine and Surgery*, no page number.

the building was written ‘Human Conservation: The Firm Foundation of Production.’”

Nine columns stood atop this foundation, one at the center reading “adequate medical and surgical care,” held up another level titled “A Healthy Energetic Working Force.” Atop the structure stood a large block labeled “Maximum Production By Experienced Intelligent Loyal Employees.”

In 1922 physician C.E. Ford from the New York based General Chemical Company spoke to the economic importance of industrial medicine. Ford quoted another industrial physician, Robert Legge: “To secure the maximum efficiency from the human machine, the industrial surgeon, virtually the human engineer, acts as the agent for stabilizing labor, thereby facilitating production and helping the worker to do a better day’s work, prolong the years of his activity and increase his compensation.” Ford similarly argued that physicians were to assist in “establishing in industry the conditions that are conducive to the maximum output of the plant and the maintenance of the highest power of the worker.”⁹⁷ Ford described this assistance in maximizing output as not only a matter of higher profits but as connected with fundamental aspects of society. “Industry is the chief basis for the subsistence of civilized peoples” and “the success of industries must depend in no small measure on the health of the workers, for the productive labor of unhealthy workers is inferior to that of healthy workers.”⁹⁸ In this understanding,

⁹⁷ C.E. Ford, “The Physician in Industry and his Relation to Community Problems,” in National Industrial Conference Board, *The Physician In Industry: A Symposium*, 12. Ford was quoting from Robert Legge, “Industrial Medicine,” *California State Journal of Medicine* vol. 19, no. 2 (February, 1921), 64.

⁹⁸ Ford, “The Physician in Industry and his Relation to Community Problems,” 13-14.

industrial physicians thus helped maintain and improve the very basis of modern civilized life.

Another industrial physician, Royal Copeland of the New York based Consolidated Gas Company and Commissioner of Health of New York City, connected industrial medicine with the control of disease, a relationship which extended back to some practitioners' roots in anti-tuberculosis work. Copeland wrote that controlling these diseases in industry was important to "the employer, because illness which incapacitates his employees interferes with the production of his plant through absence of employees and through subsequent lowered efficiency. The control of disease, whether in the workshop or in the community at large, is not a philanthropic project, but a hard-headed, dividend-paying investment."⁹⁹ Copeland added that "[e]very case of illness and every death is an economic loss" and while prevention "entails an expenditure of money, the investment returns a hundredfold profit. (...) The captains of industry (...) are now awakening to the fact that the preservation of the health of their workers pays in dollars and cents, and for the most part they are willing to spend money for this purpose."¹⁰⁰ Frank Rector similarly appealed to business owners' economic sense and justified industrial medicine on economic grounds. "Employers were not long in finding out that capable medical service — though its initial cost was more than they had been paying —

⁹⁹ Royal S. Copeland, "Epidemic Diseases Among Industrial Workers," in National Industrial Conference Board, *The Physician In Industry*, 49.

¹⁰⁰ Copeland, "Epidemic Diseases Among Industrial Workers," 51-52.

was the cheapest in the end, and so they began to take physicians into the factories.”¹⁰¹

Under specific arrangements of commodification, business could provide for the health of employees.

In some instances, this economic reasoning and economic metaphors informed how companies talked to employees and the public. For example, in 1924 the Pennsylvania Railroad publicly encouraged all of the Pennsylvania’s 211,000 workers to get a medical exam once a year at the company’s expense.

The locomotive is inspected before each run and, at certain intervals, is given a thorough overhauling with the object of discovering and correcting the early evidence of wear and tear. The wise motorist is very careful to see that his motor car is overhauled from time to time, seldom less than once a year, to assure himself that brakes, cylinders, valves, bearings and other parts function properly. But that other mechanism – The Human Machine – worth infinitely more than any inanimate machine – is oftentimes [sic] allowed to go years and years without being tested or examined. Furthermore – in the inanimate machine the worn out parts may be replaced at comparatively little cost, but no amount of money or time can replace the worn out parts of the human machine. No matter how robust and vigorous a person may seem to be, he should be examined from time to time in order to detect any minor defects and thus prevent the possibility of some stealthy and insidious disease gaining a foothold. It is of the utmost importance to know the warning signs of disease and to have prompt advice and attention. Eternal vigilance is the price of safety – and without health there can be no safety.¹⁰²

The Pennsylvania in advocating for medical examinations took up similar rhetoric and concepts as industrial physicians, and encouraged employees to do the same, thus

¹⁰¹ Frank L. Rector, “Relation of the Physician in Industry to Workmen’s Compensation Laws,” in National Industrial Conference Board, *The Physician In Industry*, 57.

¹⁰² Pennsylvania Railroad, “For the Information of the Public” May 1, 1924, Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

reinforcing industrial medicine's orientation toward treating people as commodities and justifying the field in economic terms.

Industrial physicians often spoke in economic metaphors and in statistical terms. Indeed, industrial physician Robert Legge described the orientation toward aggregates as one of the defining qualities of industrial medicine: "The scope of application of industrial medicine is to the larger group as a unit and it is in this relation that the main endeavors are directed."¹⁰³ Concern with and work within a statistical framework sometimes appeared in the form of an emphasis on record keeping. E.H. Ingram wrote that adequate record keeping was important for legal, economic, and scientific reasons.¹⁰⁴ The economic reasons amounted to an argument for the use of statistical knowledge to steer business operations.

The amount of time lost through avoidable accidents, infections and illnesses, with the inevitable loss in production, in comparison with the cost of medical supervision, is of vital interest to any management. The wage loss due to these causes is of serious consequence to the employer as well as the employee. A knowledge of the actual amount of money paid to workers through insurance, compensation and beneficial funds, as well as of the possible reduction in the amount of these payments that may be made by efficient medical supervision, is a need which should be met as a simple matter of good business policy, and which can be filled only by complete records.¹⁰⁵

The scientific reasons for good record keeping, for Ingram, were statistical in nature as well, and in making the point Ingram invoked statistical professionals and the

¹⁰³ Robert Legge, "Industrial Medicine," *California State Journal of Medicine* vol. 19, no. 2 (February, 1921), 64.

¹⁰⁴ The legal reasons Ingram referenced were employers' liability for accidents. Chapter six focuses on the relationship between employers' injury liability and industrial medicine.

¹⁰⁵ E. H. Ingram, "Industrial Medical Records," in National Industrial Conference Board, *The Physician In Industry*, 31.

insurance industry. Insurance here stood as a model of how to approach the problems of injury, health, and managing social reproduction, and these problems were framed in a vocabulary of risk.

The scientific need for medical records is felt by insurance actuaries as well as by industrial managements that maintain self-insurance and beneficial funds. From complete surgical records insurance rates may be calculated, experience ratings may be granted and adequate and equitable costs fixed. Complete records will also frequently give data that warrant a decrease in premium on risks, more than sufficient to defray the entire cost of medical supervision; or again such records may show that the premium is inadequate. A complete record of treatments given to injured and sick employees, is of course necessary for reference of the attending physician. The results of his methods, technique and prescriptions are his guide for future treatment.¹⁰⁶

Statistical data derived from aggregating and analyzing the results of medical examinations could help companies make better policy, save money on insurance, and practice better industrial medicine. Industrial physicians who could think in statistical concepts and produce statistical knowledge could thus benefit their employers, the workers in industry, and, as a result, further demonstrate their utility to companies. Industrial physicians ought to be able “to interpret statistics properly.” Doing so required physicians to know the workforce, labor process, record keeping, and administrative set up of the companies they worked for. “In addition, an exceptionally keen power of deduction and observation is sometimes necessary. It is more than easy to misinterpret statistics. All related data should be considered when conclusions are to be drawn and acted upon. Attendance records, weather conditions, industrial conditions, economic conditions, labor troubles, etc., may all influence or be responsible for the

¹⁰⁶ Ingram, “Industrial Medical Records,” 31.

misinterpretation of statistical data.”¹⁰⁷ This list of qualities expanded the range of information that industrial physicians should pay attention to, but it also implied a claim to the expertise and importance of doctors working in the field.

Industrial physician and New York Health Commissioner Royal Copeland argued for industry to carry out work preventing infectious disease using a statistical analogy drawn from public health. He wrote that death rates in New York City in the 1870s were 28 per 1,000 people while they were 11 per 1,000 in 1921. This meant “a hundred thousand lives were saved last year, and if illness bears a ratio to mortality of 10 to 1, a million cases of illness were prevented.” Copeland assessed the importance of these lives saved not in moral terms, but in dollar amounts. “Assuming that an average life is worth \$500, fifty million dollars were saved through the decrease in the death rate. Assuming the average duration of each case of illness to be ten days, and the average cost of each day’s illness, by reason of loss of work, medical care and other items, to be \$5.00 per day, another fifty million dollars were saved, making a total of one hundred million dollars.” Lives saved and illness prevented were money saved. Copeland added that the savings had been had for little expenditure. Since the Health Department’s 1921 budget was approximately five million dollars, one hundred million dollars worth of lives and time saved meant that New York had made “a profit of about two thousand per cent in the value of lives saved.” Copeland argued that clearly health prevention work paid, though it is not clear who collected the millions of dollars in savings he asserted. In order

¹⁰⁷ Ingram, “Industrial Medical Records,” 35.

to make business willing to carry out what he argued was an economically sound course of action, business owners and managers needed to be convinced. That convincing required information. “It is for the industrial physicians and the health authorities to supply them with facts and to direct their efforts. To this end the industrial physician should see to it that careful records are kept. (...) Without such records the work cannot be carried along in either a scientific or businesslike manner.”¹⁰⁸

Industrial medicine had become a discipline defined by risk management, from having individual medical examinations conducted based on risk management concerns to the production of statistical information to guide corporate decisions. Another episode at Pullman demonstrates the degree to which industrial medicine, and medical examinations in particular, had become established in corporations’ handling of risk, as well as showing the changing purposes to which medical examinations were put. Examinations as a diagnostic tool had begun to shift from being a means for knowing about the existing workforce to being a means for selecting among applicants and employees. After the end of the First World War, Pullman officials became increasingly concerned about labor turnover. Labor turnover was high in the early 20th century. Economist Laura Owen argues that labor turnover rates in the U.S. manufacturing regularly exceeded 100% in the 1910s and early 1920s. The rate for 1920 was 123%, meaning that for every 100 positions per year, 123 people left those positions. Owen

¹⁰⁸ Copeland, “Epidemic Diseases Among Industrial Workers,” 52.

argues that 70% of this turnover came from employees quitting.¹⁰⁹ Turnover rates may have been facilitated by the number of jobs available compared to people looking for work. Economist Jay Zagorsky argues that “the United States has only had five years between 1923 and 1994 when there were more vacant jobs than unemployed individuals” -- 1923, 1926, 1943, 1944, and 1945.¹¹⁰

Pullman officials saw labor turnover as a problem because of the costs involved in hiring and training new employees, as well as difficulties in maintaining a predictable workforce that allowed Pullman to plan production. The possibility that an employee might quit became a financial risk that the company attempted to minimize. Some Pullman officials argued that physical examinations might reduce turnover, based on the assumption that workers who left employment at Pullman did so because they had been physically unfit for their jobs in the first place. In 1923, Pullman Vice-President David Crawford wrote to Crowder that perhaps the problem of “excessive turnover” could be fixed by “some more efficient selection of men taken in and put to work.”¹¹¹ Crawford clearly viewed medical examinations as key to this “efficient selection,” as he instructed Crowder to prepare a plan and budget for expanding physical examinations of Pullman employees. In Crawford’s view the company needed to

¹⁰⁹ “History of Labor Turnover in the U.S.,” Laura Owen, Online, Internet, <http://eh.net/encyclopedia/article/owen.turnover>, accessed February 20, 2014. See also Laura J. Owen, “Worker Turnover in the 1920s: The Role of Changing Employment Policies,” *Industrial and Corporate Change*, vol. 4, no. 3 (1995): 499-530.

¹¹⁰ Jay L. Zagorsky, “Job Vacancies in the United States: 1923 to 1994,” *Review of Economics and Statistics*, vol. 80, no. 2 (May, 1998): 338-345.

¹¹¹ Crawford to Crowder, December 29, 1923. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

take all possible means of cutting down the loss in employment of men that are not going to stick and if a pre-employment physical examination would help to cull out a lot of men who are physically unfit for the jobs they are to be placed in, this would be an offset to the cost of the examination, entirely apart from the very important point of not taking on as employes, [sic] people who are clearly poor health risks.

Once again the vocabulary of risk loomed large in how businesses defined the problems to which industrial medicine was supposed to offer solutions. As with the problem of medical examination of food handlers, when it came to the problem of labor turnover, medical examinations were now meant to individualize those people who were risky in order to prevent them from gaining entry to the company as employees. The company's motivation with the problem of turnover, however, was strictly financial rather than medical.

Crowder prepared a report on labor turnover at Pullman based on figures for 1923, presented in the table below.¹¹² Crowder's figures show that Pullman had hired almost 17,000 people more than it had available positions. In some facilities, Pullman had hired almost three people for every job in 1923, and in its lowest turnover facilities Pullman had still hired five people for every four positions.

¹¹² The "hires per job" and "hires in excess of workforce" columns are my calculations using Crowder's data.

Table 6. Turnover at Pullman, 1923.

Location/Job Type	Total workforce	Hires in 1923	Hires as percentage of jobs	Hires in excess of workforce
Yard Employees (cleaners, mechanics, electricians)	5,225	14,136	270%	8,911
Car service (porters, conductors)	13,200	3,750	28%	n/a
Stores department	900	1,200	133%	300
Pullman Building	1,000	400	40%	n/a
Repair shops	4,150	7,392	178%	3,242
Pullman Car Works	8,350	2,232	27%	n/a
Michigan City	3,000	7,337	245%	4,337
TOTAL	35,825	56,447	158%	16,790

In his letter sending these figures, Crowder expressed skepticism that physical examinations would fix Pullman’s turnover problem. “More hope of avoiding labor turnover,” he said, “lies in the proper organization of the Employment Department than in pre-employment examination.”¹¹³ He added

There are probably some cases where men quit work because they are physically unable to continue and should not have been hired for the jobs at which they are put; but it is probably that the number of such cases is not great, though such as they are they might be largely eliminated by physical examination. According to the evidence given by Mr. Simmons in his memorandum to you of December 12, recently shown to me by Mr. Crawford, we do not really know why most men quit their jobs. To avoid the effect we must find the cause.¹¹⁴

Medical examinations probably did not provide a fix for the turnover problem at Pullman; Crowder’s arguments seem convincing that examinations were not the solution, particularly given the low unemployment rate and high turnover rate across the U.S.

¹¹³ Crowder to Crawford, January 4, 1924. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago. While Crowder was skeptical, it is worth noting that Harry Mock suggested that advances in industrial medicine had reduced turnover. Mock, *Industrial Medicine and Surgery*, 132.

¹¹⁴ Crowder to Carry, January 10, 1924. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records, Newberry Library, Chicago.

economy at the time. Despite his reservations, Crowder did as he was told, preparing plans for a possible physical examination program for all Pullman employees and job applicants. This study helped form the basis for Pullman's expansion of its medical examination program beyond service personnel. As Crowder later wrote to the company president, E.F. Carry, with regard to further expanding physical examinations beyond service personnel, the issue had first "arisen from the volume of labor turnover." Thus, whether or not examinations were the right solution to the turnover problem, that problem had helped further expand Pullman's medical examinations. As an organization, Pullman had come to think of job applicants as potential risks, and to approach this risk through medical medical examinations and Crowder, the head of medicine, had become central to the company's assessment and management of the company's risks deriving from the employment relationship.¹¹⁵

¹¹⁵ Industrial physicians were far from the only people to make widespread and increasing use of medical examination. Alan Kraut and Amy Fairchild have provided insightful studies of medical examination as a technique for the policing of immigrants. See Kraut, *Silent Travelers* and Fairchild, *Science at the Borders*. The use of medical examinations by industrial physicians differed from the U.S. government's use of medical examinations in border control. As Kraut has put it, "the double helix of health and fear" defined the intersection of public health and immigration. Kraut, *Silent Travelers*, 1. Industrial physicians' use of medical examinations were defined less by national policy priorities and xenophobia than by businesses' economic priorities and fear of financial costs. The motivations for their exclusion likely made little difference to those people coded as potentially harmful to the larger national or business body, though of course the consequences differed: immigrant medical inspections resulted in barring entry to the country or deportation, while employer medical examinations resulted in unemployment. At the same time, Amy Fairchild's work suggests an important conceptual similarity between medical inspections used in immigration control and industrial physicians' use of medical examinations. She notes that the main causes for rejecting would-be immigrants were causes "related to economic 'dependency,' independent of any medical factor, most often 'likely to become a public charge.'" In Fairchild's view, this was not primarily a matter of exclusion - exclusion rates never reached about one percent - but rather subordinating those included. Fairchild, 5. The over-riding point of immigrant medical examinations, in Fairchild's view, was "to discipline the labor force." Fairchild, 7. Medical examinations conveyed to immigrants "a set of expectations regarding what it meant to be, not necessarily a good citizen, but a good industrial citizen." Fairchild, 14. This dissertation discusses a similar point in terms of the commodification of working class people. State intervention regulating the make up and composition of the American working class treated

By the early 1920s, industrial medicine was well established in corporate practice and as a subfield within the medical profession. Industrial physicians had their own associations, conferences, and journals to help them meet their needs for intellectual community and professional status. Through their professional associations physicians actively shaped their field and sought to justify themselves to their corporate employers. Insurance stood as a model for how to think about managing employee health and risk served as an important keyword through which industrial physicians and corporate managers posed the problem of employee health and hiring. Industrial medicine as risk management had both aggregating and individualizing moments: industrial physicians were supposed to help produce companies' work forces as populations with particular characteristics like health and low turnover, and they did so by selecting individuals to exclude from their workforce. The industrial medical slogan of education, detection, control had come to mean providing care for workers' health to the degree that such care was profitable, and excluding people when such exclusion was profitable. Industrial

working class people as commodities. The important difference with regard to industrial medicine, however, is that industrial physicians operated according to smaller scale priorities, the business rather than the nation, and their concerns were more narrowly conceptualized and justified in financial terms. The subordination Fairchild analyzes, in which medical examinations subsumed immigrants into the U.S. industrial workforce, embodied something closer to the social viewpoint of reformers discussed in chapters one and two. Industrial physicians did think in terms of aggregates, but the operational priorities informing their actions were not the production and maintenance of social institutions like the labor market and the working class. Rather, their priorities were financially defined and tied to smaller aggregates. Instead of orienting toward the national body or the public's health, industrial physicians protected the body of the corporation and its financial health.

medicine would further transform, with the focus on selection and screening becoming more intense as argued in chapter six. These changes occurred due to further changes in the legal and legislative management of injury, which are the focus of chapters four and five.

Newton Allen. December 12th, 1906.

*A pot full of molten iron fell from a crane operated by Newton Allen at the Illinois Steel Company's Chicago plant. Liquid iron spilled onto the floor below. When Allen climbed down from the crane he found a man lying face down in the liquid metal, writhing. A few moments after turning the injured man over, Newton Allen realized he was looking at his brother, Ora. Ora Allen suffered third degree burns to his foot, leg, arms, hands, neck, and face. Three days later, he died.*¹¹⁶

¹¹⁶ William Hard, *Injured in the Course of Duty* (New York: The Ridgway Company, 1910), 6-15.

Chapter Four. Workmen's Compensation Insurance and Incentives for Safety and Discrimination

Workmen's compensation laws in the U.S. first went into effect in 1911. In creating these laws policymakers displayed a sense that markets were not self-regulating or self-preserving. At the same time, these laws used markets to govern. Policymakers sought to create a set of incentives such that employers pursuing their own interests as market actors would seek to make safety improvements in workplaces. The theory behind this arrangement held that employers who had to pay for employees' injury costs would attempt to save money by reducing accidents. In the immediate aftermath of workmen's compensation, however, critics began to argue that employers were seeking to save money in a different way, by becoming more restrictive in their hiring decisions. As the American Federation of Labor's Executive Council reported in 1914, employers were "eliminating workers whose health has been impaired by the work" as a result of compensation laws. In doing so employers were saving money by "creating an unemployable class."¹ While critics tended to blame insurers for this new discrimination, it is more likely that the problem was one of too little insurance and too little risk sharing: the less that companies pooled their compensation risks via insurance, and the more that existing insurance mechanisms passed employee injury costs on to individual companies, the greater the incentive to discriminate. Over the course of these changes, injury law and employers' policies came increasingly to inhabit an insurance-based social world-view that produced security for some and insecurity for others.

¹ American Federation of Labor, *Report of the Proceedings of the Thirty Fourth Annual Convention*, 67.

Contemporary sociologists of insurance have argued that changes in risk allocation tend to result in changes in behavior.² “Any ‘risk sharing’ arrangement,” in the words of sociologist Ulrich Beck, involves “conventions and boundaries around a ‘risk community’ that shares the burden.”³ While contemporary insurance sociology and theory predicts that changes in risk-sharing cause other changes in behavior, these results of workmen’s compensation caught many early 20th century Americans by surprise. The Massachusetts Industrial Board, for example, characterized new incentives to restrict hiring as “[o]ne of the logical but most unexpected developments of the Workmen’s Compensation Act.”⁴

² As Tom Baker writes, “all other things being equal, people behave differently when they bear the costs of their misfortunes than when they do not.” At the very least, changed allocations of risk mean changed incentives for behavior. Tom Baker, “Risk, Insurance, and the Social Construction of Responsibility,” Tom Baker and Jonathan Simon, eds., *Embracing Risk: The Changing Culture of Insurance and Responsibility* (Chicago: University of Chicago Press, 2002), 33-51, 45. Insurers have long been aware of the tendency for insurance to change the behavior of the insured, a phenomenon typically discussed under the term moral hazard, defined as “the effect of insurance on incentives.” Baker and Simon, “Embracing Risk,” in *Embracing Risk*, 15. In “Actuarial Age,” Caley Horan points out that this change in behavior reflects the character of insurance as an institution of governance: to be an insurer is to govern the behavior of others, and to change how people are or not insured is likely to change those people’s behaviors. It is worth noting that changing incentives have effects not only on the insured but on the insuring as well. Insurance is collective; risk-sharing is a relationship. To change allocations of risk is to change relationships, which can affect the behavior of all parties involved, including, in the case of workmen’s compensation, the behaviors of employers. Caley Horan, “Actuarial Age: Insurance and the Emergence of Neoliberalism in the Postwar United States,” PhD diss., University of Minnesota, 2011.

³ Ulrich Beck, *World Risk Society* (Cambridge: Polity Press, 1999), 16. See also François Ewald, “Insurance and Risk in Graham Burchell, Colin Gordon, and Peter Miller, eds., *The Foucault Effect: Studies in Governmentality* (Chicago: University of Chicago Press, 1991), 197-210.

⁴ Massachusetts Industrial Accident Board, *First Annual Report* (Boston: Wright and Potter Printing Co., State Printers, 1914), 44.

While the Massachusetts Industrial Board spoke of ‘unexpected developments,’ the criticism that workmen’s compensation could cause exclusion from employment was not unexpected, at least in some quarters. Indeed, that criticism pre-dated the creation of compensation laws in the United States and circulated in at least some American circles. In 1901 the Department of Labor published a report by social investigator A. Maurice Low on Britain’s 1897 workmen’s compensation law. Low argued that “[o]ne of the results which might have been naturally anticipated from the passage of the law was that it would lead the employers to be more careful in their selection of workmen.”⁵ Low presented similar material at the 37th Annual Meeting of the American Social Science Association in 1902. Samuel Gompers of the American Federation of Labor was a discussant on Low’s paper, though he made no comment about discrimination. Low’s report was republished in 1903 by the Massachusetts Committee on Relations between Employer and Employee and was discussed in the insurance industry.⁶ A 1904 British government report widely circulated in social reform circles in the United States reached similar conclusions to Low.⁷

Critics worried about three constituencies in particular, arguing that compensation laws provided strong incentives for employers to “weed out the aged, the married, and the

⁵ A. Maurice Low, “The British Workmen’s Compensation Act and its Operation,” *Bulletin of the Department of Labor* vol 6., no. 32 (January, 1901): 103-132, 117-118.

⁶ *Insurance Monitor*, vol. 55, no.1 (January 1907), 297.

⁷ Warren Garst, *First Biennial Report of the Iowa Industrial Commissioner to the Governor of the State of Iowa for the Period Ending June 30, 1914* (Des Moines: State of Iowa, 1914), 9. For a further discussion of transatlantic dialog among policymakers concerning workers’ compensation, see Daniel T. Rodgers, *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge: Harvard University Press, 1998), 209-265.

partly incapacitated,” as Warren Garst put it.⁸ Because each of these populations was more expensive than average to injure under compensation law, companies could economize by excluding them. Compensation laws created incentives for discrimination against married employees because of differentials in death benefits. Typically, in the event of death at work, employers paid funeral expenses if the deceased had no dependents, a cost which tended to run in the low hundreds of dollars. If the person had dependents, however, the employer had to pay compensation to the family for the lost income, which could run as high as three thousand dollars.⁹ It simply cost employers more money if a married employee died at work, compared to an unmarried employee.

The prospect of married men becoming subject to employment discrimination worried some critics. Delegates at a convention of the American Federation of Labor argued that “the most conspicuous achievement of the New York compensation law has been to force married men and heads of families out of their positions because employers fear to risk losses in indemnity to widows and orphans.”¹⁰ A committee of the New York State Federation of Labor said that “[w]e should speak out in thunderous tones our severest condemnation of employers who are attempting to nullify the act by discrimination against the married man.”¹¹ Unions were not the only people to raise concerns over married men and workmen’s compensation-related employment discrimination. An insurance industry trade journal wrote that after New York created its

⁸ Garst, *First Biennial*, 6.

⁹ N.A., *Workmen’s Compensation Law of the State of Iowa* (New York: Robertson Jones, 1914)

¹⁰ *Insurance Monitor*, vol. 62, no. 1 (January 1914), 602.

¹¹ *The Bulletin of the General Contractors Association*, vol. 5, no. 9 (September 1914), 278.

workers' compensation law "numerous complaints [were] made that some large employers of labor have discharged or threatened to discharge married employees, attempting to justify their action upon the ground that the Compensation Law imposes a greater burden upon industry where such men and women are employed than it does in the case of unmarried employees."¹² Fred Mason, an executive with the Shredded Wheat Company said that the "workmen's compensation law (...) is so severe that in case an employe [sic] with a large family is hurt the responsibility of the employer is tremendously heavy. This has had the effect of throwing out of work men with large families."¹³ The New York Workmen's Compensation Commission complained that the compensation law gave an employer "strong incentive and temptation to lighten his burden under the act by discharging or refusing to employ married men."¹⁴ The New York Labor Commissioner reported that New York Labor Department inspectors had found "discrimination by employers against married men and those physically disabled" as a result of workmen's compensation.¹⁵

Critics identified workmen's compensation as a source of insecurity for older workers as well. The Massachusetts Industrial Board argued in 1914 that "the Workmen's Compensation Act" had resulted "in the throwing of aged and infirm employees out of industry."¹⁶ The Board reported that "almost immediately" after workmen's compensation laws were implemented "[o]ne company in Massachusetts (...)

¹² *The Week*, August 8, 1914, 826.

¹³ *Brotherhood of Locomotive Firemen and Enginemen's Magazine*, vol. 57, no. 1 (July 1914), 187.

¹⁴ *The Standard*, August 15, 1914, 175.

¹⁵ Lynch, *Annual report of the Commissioner of Labor*, 18.

¹⁶ Massachusetts Industrial Accident Board, *First Annual Report*, 44

discharged twenty-two employes [sic], who were either aged or under par physically, within a few weeks after the act went into effect.”¹⁷ It is important to note that the definition of an acceptable body had changed; what defined ‘par’, to use the Massachusetts Industrial Board’s term, had been redefined by employers’ new financial concerns under the revised rules of injury liability. The same year as the Board’s report, an Iowa labor assembly called for the government to “look after the welfare of its aged and partially incapacitated workers” by amending the law in some way so as to eliminate the incentives for employers to discriminate.¹⁸

Age discrimination pre-dated workmen’s compensation, to be sure.

Demographers Roger L. Ransom and Richard Sutch argue that late 19th century U.S. wage earners often experienced declining wages late in life. Workmen’s compensation, however, changed the form of employment discrimination against older workers. It reduced the possibilities for inclusion in a subordinated position (employment but at lower wages) and increased pressures toward exclusion from employment. Compensation laws may have also lowered the age ceiling, making workers become considered old faster. The new forms of age discrimination were in tension with previous norms of age, gender, and class. Thomas R. Cole has argued that in the 19th century the normative notion of old age became one of “healthy, productive independence.” As Cole notes, many people did not live out this normative ideal; it was primarily a white, masculine,

¹⁷ Garst, *First Biennial*, 8.

¹⁸ Geo. C. Campbell to Governor Clarke, Dec. 31, 1914, Multiple Governors Correspondence, Box 21, Folder “Correspondence – State Officers, Boards, & Depts: Veterinary Surgeons (3) – Workmen’s Compensation.” Multiple Governors Correspondence: State Officers, Boards and Departments, State Historical Society of Iowa, Des Moines, Iowa.

middle and upper class phenomenon. Ability to live out this ideal was predicated in part on access to income a portion of which could be saved for old age.¹⁹

Age discrimination in hiring no doubt pre-dated workmen's compensation, but the laws created new incentives for this discrimination. A. Maurice Low reported that in the British case "since the enactment there has been a tendency among employers not to employ men who have passed their prime."²⁰ Low added that "one of the effects of the law is to make it more difficult for elderly men" because a "workman past his prime is more likely to become injured than one younger and more alert, and as the law imposes severe liabilities on the employer he will naturally take every precaution to minimize his risk." The 1904 British Departmental Committee report offered similar conclusions as

¹⁹ Thomas R. Cole, *The Journey of Life: A Cultural History of Aging in America* (Cambridge: Cambridge University Press, 1992), 146. L. Ransom and Richard Sutch argue that voluntary "[r]etirement was not unusual at the turn of the century; in 1900 the probability of eventual retirement for a 32-year-old man was more than 35 percent." While this does support the authors' contention that retirement was prevalent, this also means that almost two thirds of male wage earners in their early thirties could expect not to retire voluntarily. Ransom and Sutch examined waged labor force participation for men over 60. They found participation rates that ranged from about sixty four to sixty seven percent from 1890 to 1910. This suggests that the expected norm for working class men was waged work well into what was considered to be old age. Roger L. Ransom and Richard Sutch, "The Impact of Aging on the Employment of Men in American Working-Class Communities at the End of the Nineteenth Century," 303-327 in David I. Kertzer and Peter Laslett, *Aging in the Past: Demography, Society, and Old Age* (Berkeley: University of California Press, 1995); 305. Those men who did manage to retire did so by saving wages earned earlier in life. Ransom and Richard Sutch, "The Impact of Aging on the Employment of Men; 303-304. Gregory Wood details pressures on workers to speed up and argues that employers associated youth with the capacity to do this work. Gregory Wood, *Retiring Men: Manhood, Labor, and Growing Old in America, 1900-1960* (Lanham: University Press of America, 2012); 24-25. Compensation laws, however, created specifically financial pressures toward exclusion; these points are compatible. Machinery is physical, but it is also purchased and financed and this financial. Karl Marx distinguished between the labor process, understood as the physical, social, and technological organization of the activities carried out at work, and the valorization process, understood as the monetary and financial aspect of companies' operations. In a capitalist society in general the valorization process shapes rather than serves the labor process and society more broadly. On this distinction see Karl Marx, *Capital, Volume I: A Critique of Political Economy* (London: Penguin, 1976), 283-306. For commentary on that section of *Capital*, see David Harvey, *A Companion to Marx's Capital* (London: Verso, 2010), 109-134.

²⁰ Low, "The British Workmen's Compensation Act and its Operation," 117-118.

Low, noting that “diseased, weak or partially maimed persons” were particularly subject to employment discrimination under workmen’s compensation.²¹

The same pattern played out in the United States. In his 1914 report Iowa Industrial Commissioner Warren Garst quoted a letter from J.O. Boyd of Keokuk, a lawyer “for large employers” who was thus, Garst said, “in a situation to forecast the effect of the present insurance methods in causing loss of employment.” Boyd said “The old man is carrying a heavier weight than he ever carried before.”²² Workers in Los Angeles agreed, voicing concerns over age discrimination. In 1917 the *Los Angeles Times* reported that older workers believed workmen’s compensation created age discrimination against people over the age of 45. Workers planned to march carrying signs reading “The Compensation Law Put Us Out of Work.” “[T]heir famous law has thrown thousands of us out of jobs,” said one worker.²³

People with physical conditions that would today be considered disabilities were also identified as subject to discrimination under compensation laws. Workers and unions wrote to industrial commissions “emphasiz[ing] especially the danger of loss of employment in the case of men having only one eye. Persons so afflicted are often just as capable as ever to earn full wages, but as they have only one eye remaining they are

²¹ Garst, *First Biennial*, 9. It is worth pointing out that this report suggested that disabled people were capable of earning the same amount as the able-bodied, because the disabled were equally able to work. For more on the relationship between (dis)ability and (in)ability to work, see Sarah Rose, “No Right to be Idle: The Invention of Disability,” (PhD diss., University of Illinois at Chicago, 2008). Rose argues that workmen’s compensation laws played a pivotal role in shaping the notion of disability as bodily inability to perform labor.

²² Garst, *First Biennial*, 6-7. Ellipses in original.

²³ Los Angeles Times, Feb 11, 1917, 18.

peculiarly exposed to complete blindness.”²⁴ Exposure to a greater chance of blindness made one-eyed people more risky to hire under workmen’s compensation statutes. A workplace accident that cost a worker sight in one eye was more expensive to employers if the employee only had one sighted eye to begin with. The same was true for people with a range of physical conditions.²⁵ Injuries were more expensive to employers when the injuries befell an employee with a medical condition, a missing limb, a missing eye, or similar conditions.

That people with disabilities are unemployed can seem intuitively obvious to many 21st century Americans, as if to be disabled is automatically to be unemployed.²⁶ As such, it is worth discussing disabled people’s waged workforce participation prior to workmen’s compensation. People with physical conditions that likely would be

²⁴ Garst, *First Biennial*, 7.

²⁵ Sarah Rose argues that the exclusion of people with disabilities in response to workmen’s compensation was a formative episode in creating disability as inability to work in modern American culture. Rose traces the development of the category of disability in social policy, and the social and cultural effects of the changes in that category. As Rose documents, prior to compensation laws, people who suffered disabling injuries tended to continue to work. After compensation laws, people with disabilities faced much more inhospitable labor markets. Rose also points out that disabled workers were not accounted for within the damage award schedules set up by compensation laws, frequently resulting in lengthy lawsuits when disabled workers suffered injuries. Disabled workers were effectively left out of the improvements made by workmen’s compensation. Furthermore, the economic exclusion of these people contributed to the development of the idea that disability means inability to work, such that laws meant to respond to the problem of workplace injury ultimately rendered people with disabilities newly and increasingly dependent. Sarah Rose, “No Right to be Idle: The Invention of Disability, 1850-1930.” PhD diss., University of Illinois at Chicago, 2008. On class, work, and disability, see also Sarah Rose, “‘Crippled’ Hands: Disability in Labor and Working-Class History,” *Labor: Studies in Working-Class History of the Americas*, vol. 2 (2005): 27-54, and John Williams-Searle, “Courting Risk: Disability, Masculinity, and Liability on Iowa’s Railroads, 1868-1900,” *The Annals of Iowa* no. 58 (Winter, 1999): 27-77. On the relationship between disability and law, see Welke, *Law and the Borders of Belonging in the Long Nineteenth Century United States*.

²⁶ This one many ways in which it is all too easy for many people to understand “the social marginalization of people with disabilities as natural and self-evident,” as Catherine Kudlick and Paul Longmore have put it. Catherine Kudlick and Paul Longmore, “Disability and the Transformation of Historians’ Public Sphere,” *Perspectives on History* vol. 44 no. 8 (November, 2006).

considered disabilities today seem to have been employed across the economy in the early twentieth century United States. This is not a particularly well-documented phenomenon, because often people with physical impairments were not particularly notable in workplaces.²⁷ They became newly visible as disabled - and newly disabled, if disability is understood as a political condition - as a result of the transformations in legal allocation of risk. As such, their prior unremarkability means that there is no comprehensive data on disabled people's employment, but there is some information available.

In her fictionalized account of her experiences working briefly at an industrial laundry, social reformer Dorothy Richardson recounted that on her first day at work, a co-worker asked, "Ever worked at this job before?" Richardson said, "No. Have you?" Her co-worker "replied with a sharp laugh, and flinging back the sleeve of her kimono, thrust out the stump of wrist," saying

"It happens every wunst in a while, when you was running the mangle and was tired. That's the way it was with me: I was clean done out, one Saturday night, and I just couldn't see no more; and first think I know - Wo-o-ow! and that hand went right straight clean into the rollers."²⁸

²⁷ It is likely that conditions that would today be called disabilities were ubiquitous in working class life in the early twentieth century, especially given the prevalence of injury. On disability as a category for labor and working class history, see Sarah Rose, "'Crippled' Hands: Disability in Labor and Working-Class History," *Labor: Studies in Working-Class History of the Americas*, 2005, 2: 27-54, and Sarah Rose, "No Right to be Idle: The Invention of Disability," (PhD diss., University of Illinois at Chicago, 2008). John Williams-Searle's work also integrates disability and gender into the study of labor history. See John Williams-Searle, "Broken Brothers and Soldiers of Capital: Disability, Manliness, and Safety on the Rails, 1863-1908," (Ph.D. diss, University of Iowa, 2005), John Williams-Searle, "Courting Risk: Disability, Masculinity, and Liability on Iowa's Railroads, 1868-1900," *The Annals of Iowa* no. 58 (Winter, 1999): 27-77, and John Williams-Searle, "Cold Charity: Manhood, Brotherhood, and the Transformation of Disability, 1870-1900," in Paul Longmore and Lauri Umansky, eds., *The New Disability History* (New York: New York University Press, 2001): 157-186.

²⁸ Dorothy Richardson, *The Long Day: The Story of a New York Working Girl* (Charlottesville: University Press of Virginia, 1990), 233-234.

For Richardson, the co-worker's injury was not meant to be a rare occurrence; the women's crushed hand was a symbol of the horrors of women's unregulated employment in industrial work generally. Whatever liberties Richardson may have taken with actual conversations she had with co-workers, her choice to include this anecdote demonstrates something Richardson did not foreground: workers who suffered disabling injuries sometimes returned to work.²⁹

In her 1914 study, "Care and Education of Crippled Children in the United States," Edith Reeves argued in favor of vocational education for children with disabilities. Reeves appealed to the power of waged work to uplift: "the cripple of wage-earning age takes great strides toward a normal point of view when he finds himself actually doing useful work (...) such work may partially bridge the gap between them and the outer world, and so increase their happiness." This perspective relied on the possibilities of disabled people actually finding employment. Reeves believed this was possible: "many crippled children who would otherwise be entirely dependent can be taught occupations by which they can earn part of their own support. (...) It may be said in general that there are many occupations open to cripples whose hands are in good condition, and also that the loss or disablement of one arm is by no means a barrier to choice among a considerable number of employments." Reeves cited a 1911 census of Birmingham, England which found that just over 21% of "cripples" there were able to

²⁹ For other examples of people returning to waged work after disabling injuries, see United States Senate, *Report on Condition of Woman and Child Wage-Earners in the United States, Volume 12: Employment of Women in Laundries*. Washington: Government Printing Office, 1911, 52, 54; and Crystal Eastman, *Work Accidents and the Law*, 227.

work “under ordinary conditions” and that almost 27% could do work at home or in a workshop for disabled workers.³⁰

In 1915, the Welfare Federation of Cleveland conducted a survey based on “a house-to-house canvass and visits to 150,000 families” and which found “4,186 persons [who] were reported by themselves or their families as physically handicapped.” Out of 3,250 people of working age, “fifty-nine percent were employed” or 1,912 people employed and 1,338 unemployed.³¹ The Welfare Federation was surprised by this finding, writing that “one of the most interesting and valuable points about this Survey is the distinction between the definition of ‘cripple’ adopted at the start and the one actually used as a working basis by the Cleveland Committee.” The committee had begun by defining a disabled person as one “whose (muscular) movements are so far restricted by accident or disease as to affect his capacity for self-support.” The Cleveland Committee found, however that the same physical condition could be “a measurable economic handicap in one case and apparently none at all in another.”³² The report did note that “the development of Workmen’s Compensation and Employers’ Liability Acts” had begun to worsen employment prospects for people disabilities. “Employers will not stand for the employment of handicapped labor if it increases insurance rates or their liability for compensation in case of accident – especially if the handicapped workman did not

³⁰ Edith Reeves, *Care and Education of Crippled Children in the United States*. New York: Survey Associates, 1914, 64, 67.

³¹ *Education and Occupations of Cripples Juvenile and Adult: A Survey of All the Cripples of Cleveland, Ohio, in 1916*. Cleveland: Welfare Federation of Cleveland, 1916, 50.

³² *Education and Occupations*, 12.

meet with his original disability in their employ.”³³ The report argued that “[t]he increased care with which, under existing [compensation] laws, employers tend to avoid the added risks of liability in employing physically handicapped labor, place the handicapped, however competent they may be, at an increasing disadvantage except at times and places where other labor is difficult or impossible to secure.”³⁴ The above sources are not an exhaustive document of disabled people’s employment, but they do demonstrate that people with disabilities worked for wages prior to compensation laws.

That workmen’s compensation laws involved exclusion might come as no surprise to readers today, given the existence of legal racial segregation, immigration restriction, eugenics, and other forms of discrimination and hierarchy in the early 20th century United States.³⁵ With workmen’s compensation, however, forms of exclusion

³³ *Education and Occupations*, 15.

³⁴ *Education and Occupations*, 19-20.

³⁵ On disability and immigration restriction, see Douglas C. Baynton, "Disability and the Justification of Inequality in American History," in Paul Longmore and Lauri Urmansky, eds., *The New Disability History: American Perspectives* (New York: New York University Press, 2001), 33-57. For a sweeping overview of this period with a focus on the relationship between the American state and justice, power, and inequality, see Dawley, *Struggles For Justice* and, emphasizing an earlier period and continuities across the 19th and early 20th century, Barbara Young Welke, *Law and the Borders of Belonging in the Long Nineteenth Century United States* (Cambridge: Cambridge University Press, 2010). On racism in the early 20th century U.S., see David Southern, *The Progressive Era and Race: Reaction and Reform, 1900-1917* (Wheeling: Harlan Davidson, 2005). On immigrant exclusion, see Lucy Salyer, *Laws Harsh As Tigers: Chinese Immigrants and the Shaping of Modern Immigration Law* (Chapel Hill: University of North Carolina Press, 1995). Racial and class ideology was often dressed in scientific garb in this era. See Alan Kraut, *Silent Travelers: Germs, Genes, and the Immigrant Menace* (New York: Basic Books, 1994) and Amy Fairchild, *Science at the Borders: Immigrant Medical Inspection and the Shaping of the Modern Industrial Labor Force* (Baltimore and London: Johns Hopkins University Press, 2003). The insurance industry has a long history of dressing up social hierarchy in scientific garb. Beatrix Hoffman and Megan Wolff have written about Prudential actuary Frederick Hoffman’s attempt to use actuarial science to argue for the racial inferiority of African Americans. See Beatrix Hoffman, “Scientific Racism, Insurance and Opposition to the Welfare State: Frederick L. Hoffman’s Transatlantic Journey,” *Journal of the Gilded Age and Progressive Era* vol. 2 (April, 2003): 150-190, and Megan J. Wolff, “The Myth of the Actuary: Life Insurance and Frederick L. Hoffman’s Race Traits and Tendencies of the American Negro,” *Public Health Reports* vol. 121, no. 1 (2006): 84-91. Historian Daniel Bouk argues that insurers through the 19th and

associated with the insurance industry and driven by financial concerns made their way into employment.³⁶

Without screening “at the entrance gate” of a risk pool, insurance theorist Henry Lipincott wrote in 1905, “the weakest and least desirable lives would be surest and soonest to come in.”³⁷ While Lipincott wrote in reference to life insurance, this same practice of gatekeeping around a risk pool was at the center of the controversy over workmen’s compensation and employment discrimination. Commentators on all sides of the issue explicitly framed matters in a vocabulary of risk and insurance and argued that compensation laws caused the introduction of new insurance-style forms of gatekeeping to employment. Under these new forms of gatekeeping, employees and applicants who employers had previously found acceptable began to be passed over for jobs because they had the potential to raise employers’ costs. Insurance methods of allocating injury costs had grouped workers’ injury risks together, and introduced new reasons to exclude some people from those groups.³⁸

early 20th century repeatedly engaged in practices of discrimination that took existing social inequality and cast it as objective and scientific. Often even when insurers have not actively been committed to social inequality as Hoffman was, their categories and practices have been indifferent to social inequality in such a way that they have reinforced it. Daniel Bouk, “The Science of Difference: Developing Tools for Discrimination in the American Life Insurance Industry, 1830-1930.” PhD diss., Princeton University, 2009. Caley Horan demonstrates that these tendencies operated well into the 1970s in her account of feminist and civil rights organizations’ criticism of insurers for discriminatory practices. Horan, “Actuarial Age.”

³⁶ This is not to suggest that employers did not practice exclusion prior to workmen’s compensation. The early 20th century United States was rife with forms of exclusion, in employment, education, immigration policy, and beyond, as many historians have documented. See for example Alan Dawley, *Struggles For Justice*. Still, workmen’s compensation created new additional reasons for exclusion from employment.

³⁷ Quoted in Baker, “Containing the Promise of Insurance,” 261.

³⁸ As Deborah Stone has put it, gatekeeping around a risk pool “is a political exercise in drawing the boundaries of community membership” and “creating communities of privilege” which are fragmented

As noted above, Iowa's Industrial Commissioner Warren Garst claimed in 1914 that people who were "impaired risks" were seeing their employment prospects worsened under workmen's compensation.³⁹ Iowa labor union officials concurred, declaring the existence of "a class of persons who are discriminated against" and "los[ing] their employment because they are poor risks."⁴⁰ Defenders of changed hiring practices in response to compensation laws spoke in terms of risk and insurance as well. In 1914 the General Contractors Association, a construction industry trade organization, said that "workmen's compensation is nothing more nor less than life and accident insurance combined."⁴¹ As such, when employers reacted to workmen's compensation statutes by becoming more selective, they were simply doing what insurance companies did: managing their risk pools in a financially savvy manner. The Contractors Association made these remarks as a criticism of New York Industrial Commissioner John Mitchell. Mitchell had said he was "thoroughly opposed" to employers becoming more selective in hiring as a result of workmen's compensation, adding "a man dependent on his labor for a living had a right to conceal any physical defect that he might have."⁴² It is important to note here that what made a particular physical condition into a 'defect' had changed, and

"into ever-smaller, more homogeneous groups." Deborah A. Stone, "The Struggle for the Soul of Health Insurance," *Journal of Health Politics, Policy and Law* vol. 18, no. 2 (June 1993): 287-317; 299, 290.

³⁹ Garst, *First Biennial*, 8. Historian Daniel Bouk has traced the history of the category of impairment. Impairment bundled together a host of categories believed to contribute to greater mortality. As such, impairment was a term and a concept through which life insurance companies determined who they would insure. Bouk, "The Science of Difference," 194-247.

⁴⁰ J.J. Johnston and C.A. McClure to Governor Clarke, Dec. 31, 1914, Multiple Governors Correspondence, Box 21, Folder "Correspondence – State Officers, Boards, & Depts: Veterinary Surgeons (3) – Workmen's Compensation." Multiple Governors Correspondence: State Officers, Boards and Departments, State Historical Society of Iowa, Des Moines, Iowa.

⁴¹ *The Bulletin of the General Contractors Association*, September, 1914, 278.

⁴² *New York Times*, Aug 12, 1914.

the change had everything to do with legal liability and cost allocation. A ‘defect’ was a condition that would cost an employer more money under the new rules introduced by workmen’s compensation legislation.⁴³

The Contractors Association objected to Mitchell’s statement defending people who tried to get around employer efforts at screening out potentially risky individuals. In their objection, the Contractors Association used insurance as a metaphor saying that “false statements made in applications for life insurance render the policy void, and certainly an applicant who refused to submit himself to a medical examination could not expect the insurance company to issue him a policy.” Matters should not be any different with employers under workers’ compensation, the Contractors Association suggested.⁴⁴

In 1915 James Harrar, the medical director at Lord and Taylor’s department store in New York, similarly used insurance company practices to justify his employer’s practice of screening job applicants. The point, Harrar stressed, was the same as in “an ordinary life insurance examination (...) to weed out all impaired applicants from employment.” Harrar admitted that in a sense “the procedure is a selfish one” but he defended the practice, arguing that “accident and health insurance companies (...) will

⁴³ The legal shaping of the meaning of defect is part of the broader role of law in the making of the social and cultural categories. For more work along these lines, see Barbara Young Welke, *Law and the Borders of Belonging in the Long Nineteenth Century United States* (Cambridge: Cambridge University Press, 2010); Margot Canaday, *The Straight State: Sexuality and Citizenship in Twentieth-Century America* (Princeton: Princeton University Press, 2009); and Susan Schweik, *The Ugly Laws: Disability in Public*, (New York: NYU Press, 2009).

⁴⁴ *The Bulletin of the General Contractors Association*, September, 1914, 278. On the history of workplace medical examinations, see Nugent, “Fit for Work.”

not accept an impaired risk if they have knowledge of it.”⁴⁵ Lord and Taylor was only doing what insurers had already been doing. Harrar added that, “every employer retains the privilege of not engaging the applicant who is stupid, careless, dirty, or ignorant; and there should be no reason why an employer has not the right to ask as well for average health in the applicant.”⁴⁶ In effect, Harrar argued, Lord and Taylor adopted the same practice as insurers, screening applicants to who sought entry to the company’s risk pool, in order to manage the composition of the company’s risk pools.

Changed hiring practices at some companies could indirectly encourage other companies to make similar changes. The medical director for the Chicago-based Crane Company stated that Crane was “practically forced” to begin screening job applicants “because other industries were doing it and this company was hiring the rejected men.” This had the potential to lead to a greater accumulation of higher-risk employees at Crane than at other companies, which would raise Crane’s total cost for workplace injuries relative to its competitors. Crane officials felt that they had no choice but to implement medical examinations as a way to control employment risks, because other companies had done so.⁴⁷ Crane’s medical director thus described a situation in which other companies acted in line with the incentive to restrict hiring in such a way that intensified

⁴⁵ James Harrar, “How a Large Department Store Conserves the Health of Its Workpeople,” *Safety: Bulletin of the American Museum of Safety* vol. 3, no.3 (March, 1915), 67-71, 70. Chapter three discussed the rise of companies’ use of medicine and the ways in which the field of industrial medicine became increasingly organized around protecting companies from financial loss. Chapter six returns to industrial medicine, detailing how that field became remade around the the goal of reducing companies’ liability risks under workmen’s compensation.

⁴⁶ Harrar, “How a Large Department Store Conserves the Health of Its Workpeople,” 69.

⁴⁷ H. Guilbert to E.F. Carry, April 29, 1924. Administrative Subject Files, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Box 1, Folder 14, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Newberry Library, Chicago, Ill.

that incentive for Crane, a situation is in keeping with dynamics identified by legal scholar Tom Baker: “identify[ing] and exclud[ing] high risks improves [a company’s] competitive position in two ways: it lowers its average risk and, assuming the people it rejects go elsewhere, it increases the average risk of its competitors” as higher risk people move to other company’s risk pools. While Baker wrote about insurance, Crane’s medical director believed this pattern had occurred at Crane as well: some companies restricted hiring, lowering their risks and raising risks for others, thus indirectly encouraging Crane to implement new gatekeeping measures.⁴⁸

Both critics and advocates of increased selectivity by employers agreed that compensation laws could create incentives for changed hiring practices. There was significant disagreement, however, about the exact source of this incentive. Did the fact of risk transfer itself create incentives to discrimination? Or was it a matter of the particular ways in which employers secured their compensation liabilities? That is to say, would all workmen’s compensation incentivize employment discrimination, or could changes in the particular form of compensation insurance solve the problem? As employer, government, union, and insurance officials argued over these questions, they

⁴⁸ Baker, “Containing the Promise of Insurance,” 261. Employers’ changed hiring practices foregrounds the fact that employers govern a portion of social life delegated to them by law. See Christopher Tomlins, “How Who Rides Whom. Recent ‘New’ Histories of American Labour Law and What They May Signify,” *Social History* 20, no. 1 (1995): 1-21; Christopher Tomlins, *Law, Labor and Ideology in the Early American Republic*, (Cambridge: Cambridge University Press, 1993). Historians have tended to focus on how individual employers govern their employees directly, but employers also indirectly govern jobseekers and the unemployed through the decisions they make *en route* to their goals as businesses. The situation at Crane, like Baker’s description of insurance companies, also points out the ways in which businesses govern each other indirectly through competition in the market. Insurers also govern the insured. Caley Horan has insightfully analyzed what is particular about insurance as a manner of governing. Horan, “Actuarial Age,” 12-18. Horan focuses on insurance as governance “beyond the state.” Horan, “Actuarial Age,” 18.

politicized particular methods of securing employers' ability to pay for the compensation liabilities.

In addition to making employers newly liable for employees' injuries, compensation laws required employers to have the financial means to meet this liability. Often employers secured their ability to pay for employees' injury costs via insurance: many employers enrolled in employers' mutual insurance programs, purchased a policy from a private insurance company, or, in states where such an option existed, enrolled in a state-provided insurance plan.⁴⁹ As insurance measures, all of these methods involved employers pooling their accident liability risks, thus transferring part of their responsibility to provide financial security for injured employees to some other party. Other employers decided to forego insurance, carrying their own risk, a practice known as self-insurance.

In his 1914 report, Iowa Industrial Commissioner Warren Garst argued that discriminatory incentives could be eliminated from workmen's compensation if private insurers were removed from the equation. Garst quoted a letter from an employer who said that due to higher insurance rates he planned to fire three longstanding aged and partially disabled employees "unless there is some way in which we can be released of the extraordinary hazard" posed by employing the three. The letter said that the three "will not be accepted by the insurance companies."⁵⁰ Garst quoted another letter blaming

⁴⁹ Seven states had mandatory and exclusive state insurance funds for workmen's compensation risk. David A. Moss, *When All Else Fails: Government as the Ultimate Risk Manager* (Cambridge: Harvard University Press, 2004), 168.

⁵⁰ Garst, *First Biennial*, 6.

inspectors from workmen's compensation insurance companies. If the inspector "sees the one-eyed man, the man with the wooden leg, the man with the varicose veins, and the old man, he will tell you that each and all of these make your rate higher and that your insurance rate will be reduced if you do not have these employes (sic) the next time he comes around."⁵¹ Some labor union officials similarly attributed discrimination to "private insurance companies" who raised the premiums of employers who hired "poor risks" like older and physically impaired workers.⁵² The New York Workmen's Compensation Commission also placed the blame on private insurers. The insurance companies "may attempt to reduce their compensation payments by encouraging or instructing employers" to fire or refuse to hire married or physically-impaired individuals.⁵³ For critics like Garst and many union officials, the solution was to insure employers' liability by state monopoly insurance. Unsurprisingly, this proposal was unpopular with insurance companies, as it threatened to close them out of employers' liability insurance markets.⁵⁴ An insurance industry publication expressed concern over complaints that insurers were causing workers to be "thrown out of work by their

⁵¹ Garst, *First Biennial*, 6-7. Ellipses in original.

⁵² The Ottumwa Trades and Labor Assembly likewise feared discrimination against "persons that private insurance companies would object to." See J.J. Johnston and C.A. McClure, J.J. Johnston and C.A. McClure to Governor Clarke, Dec. 31, 1914, and Ottumwa Trades and Labor Assembly to Governor Clarke, Dec. 31, 1914. Multiple Governors Correspondence, Box 21, Folder "Correspondence – State Officers, Boards, & Depts: Veterinary Surgeons (3) – Workmen's Compensation." Multiple Governors Correspondence: State Officers, Boards and Departments, State Historical Society of Iowa, Des Moines, Iowa.

⁵³ *The Standard*, August 15, 1914, 175.

⁵⁴ One Iowa newspaper reported that insurance companies did discriminate but that they had stopped doing so in response to calls for a state-monopoly insurance program. *The Perry Daily Chief*, October 22, 1914.

employers,” noting that some government and union officials had “threatened to start an agitation for state insurance if these complaints are found to be well grounded.”⁵⁵

Insurance companies pushed back on two fronts, arguing first that they simply were not recommending discrimination, and adding that discriminatory incentives under workmen’s compensation did not arise from private insurance. Albert W. Whitney, an executive with an insurance industry body called the Workmen’s Compensation Service Bureau, wrote a reply to Garst that the Insurance Federation of Iowa reprinted as a pamphlet. Whitney accused Warren Garst of “disregard of the difference between theory and practice. In theory there is, to be sure, some chance for discrimination,” but “in practice it is insignificant.”⁵⁶ Whitney further claimed that investigations by Deputy Commissioner Phillips of the New York Workmen’s Compensation Commission and one of the co-sponsors of the original New York compensation act found “not only that there is no discrimination against married men but that employers prefer married men because of their greater steadiness.” Whitney said he had never heard of a case where “the physical condition of the employes [sic]” led an insurer to forgo insuring an employer.⁵⁷

The Travelers Insurance Company wrote a reply to Garst as well, which was similarly reprinted in pamphlet form. Travelers argued that insurance companies were removed from hiring and firing such that there was “no occasion for interfering with [employment decisions] or making any suggestion in respect to it.” Furthermore,

⁵⁵ *The Indicator*, January, 1914, 341.

⁵⁶ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called “State” Insurance?* (Des Moines: N.P., 1914), 32.

⁵⁷ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called “State” Insurance?*, 32.

insurance companies operated “under analytical schedules” for setting insurance rates, schedules which were

available to the public and there cannot be found in them any provision respecting the change of rate either upward or downward because of the presence or absence of those who are physically incapacitated or impaired. We can speak with absolute confidence for our own company when we say never in all our experience in compensation matters and our preceding experience in liability matters have we sought to influence or even suggest the dismissal of any man or woman because of existing physical impairment. This is absolutely unknown in our practice. (...) We do not believe a single case can be found (...) where a physically impaired man has been dismissed from service because of his impairment upon the suggestion of any insurance company.”⁵⁸

A construction industry trade publication similarly argued that “with respect to the rejection or discharge of married men we find that this complaint has very slight foundation (...) There may have been, probably have been [sic] some cases in which men known to have large families have been denied work of a particularly hazardous nature,” but, the article argued, this was a rare occurrence.⁵⁹ The *Indicator*, an insurance trade publication, stated that “[t]here have been no complaints in Iowa (...) in regard to married men having been discriminated against.”⁶⁰ The Insurance Federation of Iowa similarly argued that the claim that “the insurance companies discriminate against sub-standard risks to the serious detriment of the working classes of Iowa” had been “amply

⁵⁸ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called “State” Insurance?*, 44-45.

⁵⁹ *The Bulletin of the General Contractors Association* vol. 5, no. 9 (September, 1914), 279.

⁶⁰ *The Indicator*, January 5, 1915, 341.

and repeatedly disproved.”⁶¹ They added that this charge was “wholly unsupported by evidence.”⁶²

Not only did insurance officials deny making recommendations in favor of discrimination, they also argued that a state monopoly insurance fund would not eliminate any existing incentives to discriminate. Whitney’s reply to Garst argued that insurance company actuaries set rates using state-provided accident statistics. Private insurers could set rates scientifically, at “exactly the same rate” as any publicly-provided fund.⁶³ As such, a state fund would improve nothing. Even if discrimination may sometimes occur, Whitney added, insurance rates were “made absolutely without reference either to marital condition or physical condition,” therefore insurers could not be blamed and a state monopoly fund would not help prevent discrimination. He added that “[t]he only opportunity for discrimination by the Insurance Companies [sic] would lie in their selection of business.”

In its reply to Garst, the Travelers Insurance Company conceded that workmen’s compensation probably did create discrimination. Workmen’s compensation “in practice does place a handicap upon a physically impaired workman” because legislators had written the laws in such a way that injuries to individual elderly and disabled workers raised companies’ costs. By holding employers liable for a greater amount in the event of injuries to the already disabled, workmen’s compensation laws placed a “very heavy burden upon the employer of those who have suffered serious physical impairment.”

⁶¹ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called “State” Insurance?*, 6.

⁶² Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called “State” Insurance?*, 7.

⁶³ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called “State” Insurance?*, 29.

When older or already disabled employees suffered injuries, they would be more impaired afterward, and hence their injuries were more expensive. These more expensive injuries would raise employers' insurance premiums, incentivizing discrimination. "That employers, mindful of their own hazard" had sometimes responded refusing to hire these workers "is doubtless true," but, the company added, insurers had nothing to do with this. If anything, Travelers argued, insurance companies mitigated this problem because they dealt with aggregates and risk pools much larger than individual companies' employment rolls. Since insurance companies handled such a large volume of policies and premiums, incidents of injury to elderly and disabled workers would be "absolutely lost in the operation of the law of average."⁶⁴ Individuals were minuscule within the aggregated risk that insurance spread across multiple firms. Travelers argued that any incentives to discrimination that might exist would also exist under a state monopoly insurance plan because state fund premiums, like private insurance premiums, would be higher for employers whose employees suffered more expensive injuries. Travelers added that discriminatory incentives would be greater, not lesser, under state monopoly insurance because the risk pools insured by state monopoly insurance funds were smaller than the large multi-state private insurers' risk pool. A smaller risk pool meant less spreading of the increased injury risk due to injuries to married, older, or physically impaired

⁶⁴ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called "State" Insurance?*, 45.

employees, and so discrimination would be more likely under a monopoly plan, not less, Travelers suggested.⁶⁵

The Travelers Insurance Company's argument against Garst centered on a claim about the size of the pools across which employers' compensation risks were spread. Travelers turned this argument about the size of risk pools into an argument against the practice of allowing employers to opt out of insurance, a practice known as self-insurance. Many states allowed companies to forgo purchasing an insurance policy if the company proved to the state's insurance commission that it had sufficient funds dedicated to meeting its liability for workplace accidents. Instead of purchasing insurance or enrolling in a state-provided insurance plan, a company that self-insured placed a large sum of money aside to use to pay its employees' injury costs. Travelers argued that self-insurance made companies especially likely to practice discrimination. "If any discrimination exists in this state against aged, married, or physically imperfect workmen, it will, in our judgment, be found only in concerns where the Industrial Commissioner

⁶⁵ In its report on the problem of workplace injury, the Iowa Employers' Liability Commission implied that the combination of state and market-based insurance had particularly problematic results for the law of averages. The Commission said that the State of Massachusetts made a mistake by creating a state-provided workplace injury insurance plan but allowing private insurers to compete with the state plan. This was a mistake because the insurance "companies would seek the cream of the risks" while the state plan would be left with "the greater number of the most undesirable ones and in addition thereto reduce the number of patrons" of the state plan to such a degree that it would be able "to obtain and apply the rule of average, it being a recognized established principle of insurance that unless you can obtain a sufficient number of employers having a sufficient number of employes [sic], reaching to such number as will enable the making of estimates of rates upon a good general experience, that you cannot obtain a reasonable and satisfactory safe average to determine an equitable rate reasonably safe to meet the requirements without overburdening the industries coming within the limited scope." Iowa Employers' Liability Commission, *Report of Employers' Liability Commission, Part I* (Des Moines: Emory H. English, State Printer, 1912), 9.

has permitted self-insurance: it will not be found in risks which are regularly insured” via a for-profit insurance company.⁶⁶

Legislative provisions for self-insurance of compensation risks were widespread from the beginning of compensation laws and increased over time. At the beginning of 1920, 28 states had compensation laws that allowed self-insurance. In that year, 1920, 67% of employed Americans and 75% of American employed in manufacturing worked in a state allowing self-insurance. States permitting self-insurance were home to 78% of U.S. manufacturing capital. The table below shows the number of states with compensation laws and the number and percentage of those states permitting self-insurance for the years 1913-1922.⁶⁷

Table 7. Compensation laws and Self-Insurance, 1913-1922

Year	States with compensation laws	States with self insurance provisions	Percent of compensation laws allowing self-insurance
1913	22	10	45
1916	32	19	59
1919	41	28	68
1922	42	30	71

As compensation statutes spread across the country, self-insurance of compensation risks became a standard feature of those laws. States that did not allow self-insurance of

⁶⁶ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called “State” Insurance?*, 13-14.

⁶⁷ There are no available figures for total numbers of self-insurers, but states with self-insurance were by far the majority, especially in terms of the numbers of resident employees, manufacturing employees, and capital investment in manufacture. The figures for numbers of employed persons in self-insuring states are drawn from calculations using the 1920 census. See U.S. Department of Commerce, Bureau of the Census, *Fourteenth Census of the United States Taken in the Year 1920, Volume IV: Population, 1920, Occupations* (Washington: Government Printing Office, 1923), 44. For the figures on numbers of wage-earners and capital invested in manufacturing, see U.S. Department of Commerce, Bureau of the Census, *Fourteenth Census of the United States Taken in the Year 1920, Volume VIII: Manufactures, 1919, General Report and Analytical Tables* (Washington: Government Printing Office, 1923), 296-297.

compensation risks were also more likely to have been earlier adopters of compensation laws. By 1922, of the 12 states that had compensation laws but no self-insurance provisions, eight of them had adopted their laws between 1913 and 1915.⁶⁸

In attacking self-insurance, the Travelers Insurance Company criticized the business practices of many of the largest businesses in the U.S. and the global economy in the early 20th century. While the exact number is unknown, self-insurers were numerous and were among the largest manufacturers. Indeed, seven of the ten largest firms in the world in this era became self-insurers under U.S. workmen's compensation laws: American Tobacco, General Electric, International Harvester, Pullman, Singer, Standard Oil, and US Steel.⁶⁹ The New York Self-Insurers' Association had 62 members

⁶⁸ The dates of states' adoption of compensation laws, comes from Shawn Kantor and Price V. Fishback, "How Minnesota Adopted Workers' Compensation," *The Independent Review* 2, No. 4 (1998): 557-578. For the number of states per year with self-insurance provisions, see the following sources. For 1913, see *Workmen's Compensation: Report Upon Operation of State Laws*, a report compiled by a joint commission of the American Federation of Labor and the National Civic Federation. United States Senate, Document 419, 63rd Congress, 2nd Session (Washington: Government Printing Office: 1914). For 1916, see "Workmen's Compensation Laws of the United States and Foreign Countries," *Bulletin of the United States Bureau of Labor Statistics*, no. 203 (January, 1917). For 1919, see "Workmen's Compensation Acts in the United States: The Legal Phase," *National Industrial Conference Board Research Report* No. 1, August 1919. For 1922, see William R. Schneider, *The Law of Workmen's Compensation: Rules of Procedure, Tables, Forms, Synopses of Acts, Vol. II*. (St. Louis: Thomas Law Book Company, 1922).

⁶⁹ On the size of these firms, see the work done by Alfred Chandler and Christopher Schmitz. Both created lists of the size of U.S. companies in the early twentieth century. Their lists offer the basis for rough estimate of the importance of self-insuring companies in the economy in the early twentieth century. Out of the companies that Chandler lists as the twenty-five largest American companies, twelve became self-insurers under workmen's compensation: American Smelting and Refining, American Tobacco, BF Goodrich, General Electric, International Harvester, Pullman, Singer, Standard Oil New Jersey, Standard Oil of New York, Swift, US Steel, and Westinghouse Electric. Christopher Schmitz counts these twelve companies in his list of the twenty-five largest American companies in 1912. Schmitz's list differs from Chandler's; seventeen companies on Schmitz's list soon became self-insurers under workers' compensation law. These companies included the companies already listed as well as American Can, American Car and Foundry, National Biscuit, Utah Copper, and Westinghouse Air Brake. Christopher Schmitz, "The Worlds Largest Industrial Companies of 1912," *Business History*, vol. 37, no. 4 (1995): 85-96. See also the appendices to Alfred D. Chandler, *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge: The Belknap Press of Harvard University Press, 1990) and Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge: The Belknap Press of Harvard University Press, 1977). My

in 1918.⁷⁰ *The Standard* magazine reported that same year that 37 U.S. states had self-insurance provisions in their workmen's compensation legislation and business owners in Massachusetts worried that they were at a competitive disadvantage because their state had not yet allowed manufacturers to self-insure.⁷¹ In 1919 *The Standard* reported that "over 60 per cent. [sic] of [Pennsylvania] manufacturers were covered by self-insurance" including "[f]ive hundred of the largest employers" in the state.⁷² William H. Horner, director of the Workmen's Compensation Bureau of Pennsylvania, estimated that in 1920 self-insurers operating in Pennsylvania "employ more than 900,000 persons and pay a very large part of the compensation liability incurred in the State."⁷³ The 1920 census listed 3,426,359 people as gainfully employed in Pennsylvania, with 1,426,705 of them

sources on the self-insured status of these companies are as follows. American Can: R.A. Mansfield Hobbs, "Self-Insurance," *The Spectator* May 23, 1918, 79. American Car and Foundry: *The National Compensation Journal*, April 1914, 8-9. American Smelting and Refining: Industrial Commission of Colorado, *First Report of the Industrial Commission of Colorado*, 35. American Tobacco: Mansfield Hobbs, "Self-Insurance," 79. BF Goodrich: Nebraska Department of Labor, *Second Biennial Report: Department of Compensation, 1917-1918*, 39. General Electric: Industrial Commission of Colorado, *Second Report of the Industrial Commission of Colorado*, 8. International Harvester: Nebraska Department of Labor, *Second Biennial Report: Department of Compensation, 1917-1918*, 39. National Biscuit: Industrial Commission of Colorado, *Fifth Annual Report*, 9. Pullman: H.F. Browne to F.L. Simmons, 3/27/1931, F.L. Simmons Administrative Files, 1918-1936 Box 3, Folder 64, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Newberry Library, Chicago, Ill. Singer: Industrial Commission of Colorado, *Second Report of the Industrial Commission of Colorado*, 8. Standard Oil of New York: Industrial Commissioner of New York State, *The Industrial Bulletin*, May 1923, 189. Before self-insuring, Standard Oil of New York made headlines by first enrolling in New York's state insurance plan then pulling out of the state plan and insuring with the Travelers Insurance Company. See *The Spectator*, January 4, 1917, 6. Swift: Nebraska Department of Labor, *Second Biennial Report: Department of Compensation, 1917-1918*, 39. US Steel: *The Spectator*, December 23, 1915, 397. Utah Copper: *Monthly Labor Review*, January 1921, 180. Westinghouse Air Brake: *The Spectator*, December 23, 1915, 397. Westinghouse Electric: *The Standard*, April 19, 1919, 427.

⁷⁰ R.A. Mansfield Hobbs, "Self-Insurance," 77-81.

⁷¹ *The Standard*, March 3, 1918, 231.

⁷² *The Standard*, April 19, 1919, 427.

⁷³ Horner, "The Activities of the Workmen's Compensation Bureau," 293.

employed in manufacturing.⁷⁴ If self-insurers employed 900,000 people, then approximately 26 percent of Pennsylvania's employed population worked for a self-insurer. *The Standard* estimated a 60 percent self-insurance rate among all Pennsylvania manufacturers. In 1921, New York Industrial Commissioner Henry D. Sayer reported that 380 New York employers had elected to become self-insurers. These 380 companies had deposited \$8,250,000 with the Industrial Commission as guarantee of their ability to pay for future injury liabilities. New York had 532 self-insurers by 1926.⁷⁵ Self-insurance grew in other states as well.⁷⁶

Companies could save a great deal of money by self-insuring. Indeed, saving money was the main reason to self-insure. As R. A. Mansfield Hobbs of the New York Self-insurance Association put it, “[t]he principal argument in favor of carrying self-insurance is the question of expense - for instance, one of our membership, to carry its own risk in the state fund, at its rates, for the first year of the operation of the New York act, would have had to pay a premium in excess of \$7,000,000 per annum” while its actual costs in its first year operating as a self-insurer were less than 1/10th of that cost. “None of the members [of the self-insurance association], it is believed, have exceeded a loss ratio greater than one-third of what it would cost to cover the risk in the state fund or

⁷⁴ U.S. Department of Commerce, Bureau of the Census, *Abstract of the Fourteenth Census of the United States, 1920*, 500.

⁷⁵ Industrial Commissioner of New York State, *The Industrial Bulletin* vol. 1, no. 2 (November, 1921), 24; Industrial Commissioner of New York State, *The Industrial Bulletin*, vol. 5, no. 9 (June, 1926), 231.

⁷⁶ Carl Hookstadt, “Comparison of Workmen’s Compensation Insurance and Administration,” *Bulletin of the United States Bureau of Labor Statistics* no. 301 (April, 1922). In 1922 California had 221 self-insurers employing 204,802 people, deposited security of \$4,275,000. Hookstadt, 157-158. Idaho had 46 self-insurers. Hookstadt, 160. Illinois had 558 self-insurers. Hookstadt, 164. Massachusetts had 120 self-insurers. Hookstadt, 169. Ohio had 250 self-insurers. Hookstadt, 104. Maryland had 300 self-insurers. Hookstadt, 166. Michigan about 600 self-insurers. Hookstadt, 167.

straight line insurance.” The savings came because self-insurers avoided “the burden of [paying for insurance companies’] profit or responsibility for other employers’ losses, which other insurance carriers must figure upon.”⁷⁷ E.D. Alexander, an official at the American Car and Foundry Company, estimated that self-insurers in Detroit saved “from slightly to exceed fifty per cent to about seventy per cent of the insurance rate.”⁷⁸ W.H. Burhop, the chief statistician at the Wisconsin Industrial Commission, estimated that self-insurers would have triple their accident costs if they met their accident risks via purchasing insurance policies.⁷⁹ In the words of Henry Sayer from the New York Industrial Commission:

I like rather to think of self-insurance as furnishing compensation at actual cost, and as eliminating the high cost of insurance in the private companies (...) The self-insurer finds that instead of paying large premiums for insurance some part of which goes to make up the losses of the less careful and less completely equipped employers, and some part to make up the high overhead expense of the carrier and its profits, he is paying exactly what his own accident experience requires. He does not get off any cheaper than the law requires, but he does not on the other hand have to pay anything more than the law demands.”⁸⁰

While large businesses saw self-insurance as a form of savings, some commentators argued that it was not in fact insurance and so was a departure from the effort to deal with the problem of injury via insurance principles. Henry Sayer from the New York Industrial Commission, for example, suggested that “self-insurance is a

⁷⁷ Mansfield Hobbs, “Self-Insurance,” 79.

⁷⁸ E.D. Alexander, “Suggestions to those Contemplating Self-Insurance,” *National Compensation Journal* vol. 1, no.4 (April, 1914), 8-9; 9.

⁷⁹ *Bulletin of the United States Bureau of Labor Statistics* vol. 212, June 1917 (June, 1917), 167.

⁸⁰ Industrial Commissioner of New York State, *The Industrial Bulletin* vol. 1, no. 2 (November, 1921), 24.

misnomer, for as we all know, it is not a form of insurance at all.”⁸¹ Statistician Isaac Rubinow said that “self-insurance simply means relief from insurance compulsion upon sufficient evidence of solvency.”⁸² Harwood E. Ryan, an actuary with the New York State Insurance Department, said that “[s]elf-insurance is really non-insurance. The employer simply assumes his own risk and obtains permission from the authorities to deal directly with his employe-claimants [sic] or their dependents.”⁸³ Others argued that self-insurers still operated according to insurance principles even if they did not purchase insurance enrolling them into a larger risk pool. R.A. Mansfield Hobbs, Vice-Chairman of the Self-Insurers Association, called self-insurance “the oldest and purest method of insurance with which society is acquainted.” All insurance is, Hobbs argued, is a form of “making financial provision against certain risks.” As such, self-insurance was not a misnomer, despite what critics had said. “When prehistoric man seized a club, or built himself a shelter from the weather, he unconsciously became a self-insurer of his safety, his life and health and comfort.”⁸⁴ In a sense both sides were right: self-insurers were uninsured and yet acted according to insurance principles; indeed, lack of insurance made self-insurers even more likely to act out the logic of insurance.

Travelers Insurance argued that self-insurers were particularly prone to practice exclusionary hiring in response to their risks under workmen’s compensation because of the relatively small size of self-insurers’ risk pools. Self-insurance was effectively a form

⁸¹ Industrial Commissioner of New York State, *The Industrial Bulletin*, vol. 1, no. 2 (November, 1921), 24.

⁸² Rubinow, *Standards of Health Insurance* (New York: H. Holt and Company, 1916), 179

⁸³ Harwood E. Ryan, “Methods of Insuring Workmen’s Compensation,” *Annals of the American Academy of Political and Social Science* vol. 70, no. 15 (March, 1917): 244-254, 251.

⁸⁴ Mansfield Hobbs, “Self-Insurance,” 77.

of vertical integration of the functions of insurance companies. This vertical integration was only partial, though, because of a peculiar quality of insurance as a commodity. Insurance is an institution for spreading risks over large populations. Risk spreading across multiple firms simply could not be integrated into a single firm alone. For the purposes of risk spreading, the larger the population in a risk pool, the better. Travelers Insurance argued that private insurance of accident risks removed incentives for employers to make changes in hiring practices because any differences in injury costs in individual cases due to physical condition would be tiny once averaged into the larger number of people in the insurance company's risk pool. Even though self-insurer were large employers relative to other companies, their employees formed a smaller risk pool compared to the number of people insured by insurance companies.⁸⁵ Individual employees thus formed a larger share of self-insurers' smaller risk pools, providing a greater incentive to keep out risky individuals. Because self-insurers opted not to pool their risks with other companies but instead faced their risks alone, self-insurers had greater incentives to practice gatekeeping to control their risks.

Other critics concurred with Travelers Insurance that self-insurance was the manner of handling workplace accident risk that was most likely to incentivize changed employment practices. Actuary Harwood E. Ryan said in 1914 that “[i]t has been argued that self-insurance will work to the disadvantage of labor. It is claimed that employers will apply strict standards in engaging employers, that the physically inferior and those

⁸⁵ Insurance Federation of Iowa, *Shall the State of Iowa Experiment with so-called "State" Insurance?*, 13-14.

with dependent families will be discriminated against.”⁸⁶ The New York State Workmen’s Compensation Commission argued that same year that a self-insurer was “subject to strong incentive and temptation to lighten his burden under the act by discharging or refusing to employ married men, and by instituting a rigorous physical examination of his employes [sic].”⁸⁷ Commission member John Mitchell added that some self-insurers

discharge every man who shows physical defects--that is why we do not find the workingmen advocating self-insurance (...) The premium rate is not affected, for employers who carry insurance with the casualty company or with the state fund, by the physical condition of their men. But the self-insured, because he himself pays the money, does take this factor into account in many cases. He feels that by a physical examination and a dismissal of the man not physically fit - or not physically perfect - he may reduce his cost.⁸⁸

Along similar lines, T. J. Duffy of the Ohio Industrial Commission wrote that “[e]mployers who are carrying their own risks,” which is to say, self-insurers, were particularly prone to discriminate against those “people who have already lost an eye, a hand or some other member.”⁸⁹ Delegates at the American Federation of Labor’s 1914 convention similarly blamed self-insurers for discrimination. An AFL “committee appointed to consider compensation laws reported that the heart of the trouble is in the ‘self-insurance’ systems maintained by corporations, who institute their own indemnity

⁸⁶ Ryan, “Methods of Insuring Workmen’s Compensation,” 251. Some critics rejected both self-insurance and private insurance. For example, the Cigar Makers Journal called for the elimination of both self-insurance and private insurance for employers’ workers’ compensation liabilities would do away with “all cause for physical examination of employees and for any discrimination against any class of employees” under workers’ compensation law. *Cigar Makers Journal* vol. 38, no. 12 (December, 1914), 12.

⁸⁷ *The Standard*, August 15, 1914, 175.

⁸⁸ John Mitchell, “Operation of the New York Workmen’s Compensation Law,” *American Labor Legislation Review* vol. 5, no. 1 (1915): 15-30, 21.

⁸⁹ *International Molders’ Journal* vol. 51, no.1 (January, 1915), 41-42.

funds.”⁹⁰ The AFL delegates argued that “the privilege of employers being self-insurers” should be removed from the workers’ compensation law.⁹¹

Travelers Insurance had noted that insurers had no control over hiring and firing decisions. Critics argued that self-insuring companies, however, combined the incentive as well as the opportunity to practice exclusionary hiring and firing. Carl Hookstadt pointed out that by combining employment with underwriting employees’ risks, self-insurance was particularly subject to abuse because self-insuring employers handled both employment and injury in-house.

Probably the most important objection to self-insurance is that it makes the employer practically the final arbiter in the settlement of compensation cases. The unwillingness of the employees to antagonize their employer through fear of losing their jobs will many times prevent them from appealing to the industrial commission. This latent power of intimidation possessed by self-insured employers, though they may be entirely just, effectively inhibits injured workmen from seeking redress from the commission. The commission, moreover, since it obtains its information from the accident reports of the employer, is not in a position to judge of the merits of the case unless the injured employee brings the matter to its attention.⁹²

By being both employer and insurer of employees’ risks, Hookstadt argued, self-insurers had a great deal of discretion and faced little oversight.

In 1914 General Electric employees began to complain that their employer was firing workers at its plant in Schenectady, New York. Frank Dujay, president of a union federation in the plant, the Electrical Alliance, attributed the change to self-insurance:

⁹⁰ *Insurance Monitor* vol. 62, no. 1 (January, 1914), 602. See the *Weekly Underwriter* vol. 31, no. 21 (November 21, 1914), 592.

⁹¹ *The Spectator*, December 24, 1914, 356.

⁹² Hookstadt, “Comparison of Workmen’s Compensation Insurance and Administration,” 65.

“[t]he General Electric Company carries its own insurance; that is, it pays benefits to injured workmen directly from its own treasury to the Workmen’s Compensation Commission, and it is attempting to reduce the amount of benefits it will have to pay.” Dujay called for the New York State Workmen’s Compensation Commission to do something, but the Commission declared itself “powerless to prevent a self-insuring company from discriminating so long as it acts legally.”⁹³

Many critics of self-insurance argued that employers would change hiring practices due to incentives to control workers’ injury costs. It is noteworthy that advocates of self-insurance agreed that self-insurers were subject to particularly strong incentives to change their practices in order to reduce accident costs, but disagreed about what behavior employers would take in response to these incentives. These advocates emphasized that self-insurance could incentivize employer-sponsored safety measures. R.A. Mansfield Hobbs argued that self-insurance made workplaces safer because “[w]hen the employer pays compensation out of his own pocket, he appreciates the value and necessity of safety devices.”⁹⁴ Actuary Carl Hookstadt said in his report on workmen’s compensation laws that “[p]robably the greatest social benefit derivable from self-insurance is the impetus it gives to accident prevention. Self-insured employers at least have a strong incentive to prevent accidents, because there exists a more direct relationship between their accidents and compensation costs.”⁹⁵ Along similar lines, Henry Sayer suggested that self-insurers would be “inspire[d] to efforts to reduce

⁹³ *New York Times*, August 12, 1914.

⁹⁴ Mansfield Hobbs, “Self-Insurance,” 79.

⁹⁵ Hookstadt, “Comparison of Workmen’s Compensation Insurance and Administration,” 65.

accidents and lessen the effects of them” for both financial and moral reasons. Self-insurance would foster “great improvement in the physical aspect of industry.” The improving effect of self-insurance in New York “has been splendid” said Sayer.⁹⁶ Robert McKeown of the Wisconsin Industrial Commission similarly said that “[t]he self-insurer (...) probably does realize more than those who not carry their own insurance, the cost of each individual accident, as it comes out of his own pocket directly and continues while the disability lasts.”⁹⁷

Arguments that self-insurance made work safer assumed responsiveness to incentives. This assumption may have rested on a general world-view that all humans maximize self-interest.⁹⁸ Self-insurers’ responsiveness to the incentives built into compensation laws likely resulted in part from the economic or financial particulars of those firms. Self-insurance required that a company be large enough to self-insure, and self-insurance was especially common among manufacturers, and above all among large manufacturers. These companies were predisposed to try to avoid uncertainty, unpredictability, and interruptions to production in general, beyond the particulars of the

⁹⁶ Industrial Commissioner of New York State, *The Industrial Bulletin* vol. 1, no. 2 (November, 1921), 24.

⁹⁷ Robert McKeown, “The Relation Between Workmen’s Compensation and Safety,” in *Proceedings of the Sixth Annual Convention of the Association of Governmental Labor Officials of the United States and Canada* (Washington: Government Printing Office, 1920), 97-100; 99.

⁹⁸ The conditions under which people respond to economic incentives are themselves historically produced and ultimately contingent. Rational maximizing of self-interest is an effect rather than a cause of capitalist society. While the particulars vary, in general the institutions of capitalist society tend to take this assumption and make it prescriptive, rewarding some people who act in line with this norm and punishing others who do not act in line with this norm. Though the point is not posed this way, Rakesh Kurana offers an illuminating discussion of the role of business schools in educating people into becoming the kinds of people who respond to incentives in this fashion. Rakesh Kurana, “MBAs Gone Wild,” *American Interest* (July–August 2009), Online, Internet, <http://www.the-american-interest.com/articles/2009/7/1/mbas-gone-wild/> Accessed 2/1/2014.

risk of employees who might endure more expensive injuries.⁹⁹ This predisposition resulted from both experiential and structural factors, which is to say, it resulted from both what business personnel had lived through and from the incentive structures built into their firms. Having lived through decades of economic crisis and restructured businesses in order to avoid risk and minimize crisis, the personnel who made up business likely had a culture of avoiding uncertainty. This would certainly fit with the structure of feeling among many reformers as the Gilded Age shaded into the Progressive Era.¹⁰⁰ As James Livingston has written, the late 19th century was, “[f]rom the standpoint of capital (...) more nightmare than golden age,” characterized by conflict and uncertainty.¹⁰¹

⁹⁹ See Naomi R. Lamoreaux, *The Great Merger Movement in American Business, 1895-1904*, (Cambridge: Cambridge University Press, 1985), 87; Stanley Buder, *Capitalizing on Change: A Social History of American Business* (Chapel Hill: University of North Carolina Press, 2009), 119-233; James Livingston, *Origins of the Federal Reserve System, 1890-1913* (Ithaca: Cornell University Press, 1986), 27; Martin Sklar, *The Corporate Reconstruction of American Capitalism, 1890-1916* (Cambridge: Cambridge University Press, 1988), 1-40; James Livingston, *Pragmatism and the Political Economy of Cultural Revolution, 1850-1940* (Chapel Hill: University of North Carolina Press, 1994), 84-98; Michael Perelman, *Railroading Economics: The Creation of the Free Market Mythology* (New York: Monthly Review Press, 2006); Harland Prechel, *Big Business and the State: Historical Transitions and Corporate Transformation, 1880s-1990s* (Albany: State University of New York Press, 2000). For the general emphasis on efficiency in this era, see Jennifer Alexander, *The Mantra of Efficiency: From Waterwheel to Social Control* (Baltimore: Johns Hopkins University Press, 2008), 52-100. On greater economic and political stability as a goal of workmen's compensation, see Donald Rogers, *Making Capitalism Safe: Work Safety and Health Regulation in America, 1880-1940* (Urbana: University of Illinois Press, 2009), 33; Moss, *When All Else Fails*, 7-14; James Weinstein, *The Corporate Ideal in the Liberal State, 1900-1918* (Boston: Beacon Press, 1968), 40-61.

¹⁰⁰ See for example Michael McGerr, *Fierce Discontent: The Rise and Fall of the Progressive Movement in America 1870-1920* (New York: Free Press, 2003).

¹⁰¹ James Livingston, *Pragmatism and the Political Economy of Cultural Revolution, 1850-1940*, 41. See also William G. Roy, *Socializing Capital: The Rise of the Large Industrial Corporation in America* (Princeton: Princeton University Press, 1997), 223. Roy cites the economic depression of 1893 as an important factor in the growth of large industrial corporations, because the collapse of many companies freed up capital later put to use in industrial corporations. This memory of this depression likely shaped the behavior of business personnel as well. See Stanley Buder, *Capitalizing on Change: A Social History of American Business*, 119-233, for another account of the merger movement and public and private business efforts to reduce economic uncertainty, including a discussion of the relationship between mergers and

Numerous historians have argued that fixed-capital intensive companies in the late 19th and early 20th century had a particularly strong tendency to avoid economic uncertainty and to try to avoid or control markets as a result. This tendency came in part from the structure of these kinds of firms. Expenditures for material like machinery and company infrastructure are relatively fixed costs regardless of the rate of production. A machinery intensive firm faces a large set of costs regardless due to depreciation, and perhaps loans payments, regardless of whether production is high or low. That is, the cost to increase production per unit is relatively low compared to relatively less machinery intensive firms.¹⁰² As Michael Perelman has detailed, this often led to economic crises in the late 19th century, as some firms responded to pressures to keep up outputs by cutting costs, eventually dropping costs below the cost of production.¹⁰³ Fixed capital intensive firms generated a kind of risk of uncertainty; many business people responded to these risks by restructuring and merging, seeking to control markets and, through vertical integration, effectively abandoning markets as a way to meet many of the firms' production needs.¹⁰⁴ The degree of this transformation as compared with American

investor confidence. Scholarship on economic policy and regulation in this era also shows an attempt to minimize economy uncertainty as well. Morton Keller, *Regulating a New Economy: Public Policy and Economic Change in America, 1900-1933* (Cambridge, Mass.: Harvard University Press, 1994).

¹⁰² See Naomi Lamoreaux, *The Great Merger Movement* 31-38 for a discussion of these dynamics in American industry, with an emphasis on the relationship between fixed capital intensive companies' drive to maximize output and increase the pace of production. See also Alfred Chandler on what he calls "economies of speed;" Chandler, *The Visible Hand*, 281-283. This speeding up of production was likely a factor in the rise of the accident crisis in the first place. For an illuminating discussion of the relationship between injury and "the political economy of speed" in the 19th century United States, see Christopher Tomlins *Law, Labor, and Ideology in the Early American Republic* (Cambridge: Cambridge University Press, 1993), 322-326.

¹⁰³ See Perelman, *Railroading Economics*.

¹⁰⁴ Marc Eisner identifies the 20th century United States as characterized by a "market regime" of regulation, which arose in response to corporations having "internalize[d] many functions previously

capitalism prior to the late 19th century merger wave was so great that George Perkins, an insurance executive who came to play key roles in the growth of U.S. Steel and International Harvester, described the new corporate economy as a kind of socialism. Within this ‘socialist’ corporatized economy the link between risk avoidance and corporations was so great that some commentators, such as early 20th century economist John Bates Clark, took risk reduction as the defining task and role of corporate managers.¹⁰⁵

The arguments that self-insurance made work safer were based on the view that employers would respond to the incentives under self-insurance by economizing specifically in the form of work-safety improvements. Those commentators who argued that self-insurance incentivized safety spoke from a perspective that underlay the creation of compensation laws. Reformers who called for and policymakers who crafted compensation laws had two main goals: providing income security after accidents and creating incentives for accident prevention.

Workplace injuries posed two kinds of problems: a problem of economic security and a problem of physical safety. In crafting compensation laws, reformers and policymakers sought to address both problems at once. Compensation laws were meant to provide income support to injured wage earners and their families, by guaranteeing

accomplished through market transactions.” Marc Allen Eisner, *Regulatory Politics in Transition* (Baltimore: Johns Hopkins University Press, 1993), 4.

¹⁰⁵ For Perkins and his brand of socialism, see Jonathan Levy, *Freaks of Fortune*, 265, 286. On John Bates Clark, see Levy, 281. More generally, see 264-316, where Levy describes the corporate merger wave as a risk management strategy. He documents the role played by people like Perkins, risk management professionals from financial circles in this restructuring and how they brought new finance-derived concepts of risk into corporate management.

payments, and to help prevent accidents, by charging those payments to the individual employer of the injured worker.¹⁰⁶ Making employers pay for employee injuries was supposed to incentivize accident prevention. People who argued that self-insurers were more likely to make work safer suggested, in effect, that self-insurers were the ideal type of employer under workmen's compensation, in the sense that they experienced the most intense incentives to make changes in order to control costs.

Defenders argued that self-insurers were the most likely to make safety improvements while critics argued that self-insurers were likely to avoid employing people considered likely to incur an injury of above-average cost. An incident at the self-insuring Pullman Corporation illustrates both of these tendencies. J.A. Rittenhouse, Pullman's Pennsylvania district superintendent, wrote in 1915 that he had "been trying to work out some plan by which we would avoid getting cripples in the service." Doing so "would be economy on the part of the company" because the company "seemed to be constantly getting into trouble" because of costs for employees' injuries. Employees "in the service a short time [were] coming to us and claiming that on account of hernia or kindred disease, they could not work (...) and it often developed that they had this trouble before they came into the service but had been aggravated by the strain" of work.¹⁰⁷ Rittenhouse framed his call for new forms of exclusion from employment as a financial

¹⁰⁶ David A. Moss, *Socializing Security: Progressive Era Economists and the Origins of American Social Policy* (Cambridge: Harvard University Press, 1996), 59-76; Moss, *When All Else Fails*, 152-179

¹⁰⁷ J.A. Rittenhouse to T.R. Crowder, July 7, 1915. Administrative Subject Files, 1905-1968, Pullman Corporation Records, Box 1, Folder 14, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Newberry Library, Chicago, Ill. The particular mechanism Rittenhouse proposed for this screening was medical examinations. On medical examinations as a screening mechanism through which employers sought to reduce their liabilities under workmen's compensation, see chapter six.

matter. Avoiding hiring “cripples” would be ‘economy’ because of recently adopted workmen’s compensation laws, which had redistributed the costs of employees’ injuries. Under compensation laws, exclusion paid, and that exclusion was often conceptualized via morally thin terms like economy.

Both critics and defenders of self-insurance argued that self-insurers experienced their changed liabilities under workmen’s compensation as providing particularly strong incentives to control costs. In terms of incentives, however, the differences between self-insurers and other companies were a matter of degree, not a matter of kind. Because self-insurers did not pool their compensation risks with other companies via insurance, compensation liabilities particularly incentivized changed behavior. But such motivations were built into all insurance arrangements under workmen’s compensation. In a 1914 article, Edward Phelps, a statistician and editor of an insurance industry trade journal, argued that discrimination was built into commercial insurance as such, and so workmen’s compensation could only produce discrimination. He speculated that employers had probably always preferred younger and less physically impaired applicants, but argued workmen’s compensation had given employers new reasons for this preference. Phelps held that there was a “drift toward physical selection in the employment of wage-earners coming within the range of Workmen’s Compensation protection,” because of the nature of insurance institutions. Employers would face pressures to become more selective in hiring under workmen’s compensation, Phelps argued, because the “foundation of all forms of insurance (...) the so-called ‘law of

average,' involves selection" of people for admission or exclusion. In Phelps' view, all insurance involved decisions about a minimum standard of risk, below which individuals could not gain entry to the insured risk pool. Insurance institutions by definition would seek to evaluate risks and exclude some category of people whose condition made them into relatively worse risks. "[I]t is only a matter of academic detail, so to speak, whether the condition so operating is one of age, impairment, or multiplicity of benefit-sharing dependents on the part of the injured workmen."¹⁰⁸ As such, for Phelps, any system of insuring against workplace injuries would require employers to change whom they hired. Compensation laws could only make the lives of some people more secure at the expense of pushing others out of work. No matter the institutional particulars, for Phelps, "so long as insurance is conducted on a cold-blooded business basis," workmen's compensation of any kind would create new incentives for excluding some people from employment: "There would seem to be no room for difference of opinion on this matter-of-course proposition, and I can conceive of no reason why Workmen's Compensation should be exempted from this basic insurance principle."

Phelps identified the presence of individualizing practices within compensation insurance. Insurance as risk sharing is a collectivizing practice, sheltering individuals from their risks by spreading them out across a pool. The idea that the insured party's premiums should reflect their losses, a practice known as experience rating, moved in the opposite direction. Experience rating means that insurance premiums tend to rise with

¹⁰⁸ Edward Bunnell Phelps, "Certain Grave Questions of Workmen's Compensation: Will it Lead to Discrimination Against Married Men and Slightly Impaired Lives?," *The American Underwriter Magazine and Insurance Review* vol. 42, no. 1 (July, 1914): 1-10; 4.

payouts, such that companies with more accidents would pay more costs. Experience rating turns insurance into a financial incentive to behave in less risky ways. In the words of economist John R. Commons, under workmen's compensation laws, employers' requirement "to pay accident compensation [worked] as an inducement to accident prevention."¹⁰⁹ This was the basic theory as to why workmen's compensation laws would make work safer.

This safety incentive depended upon individualizing or de-pooling practices like experience rating and self-insurance. Exposure to variable costs as a result of self-insurance and experience rated insurance policies constituted the incentive for employers to change their behavior. While self-insurers were particularly exposed to this incentive under workmen's compensation because they did not share their compensation risks with other companies via insurance policies, all employers' costs would rise with the frequency and severity of employee injuries under workmen's compensation. Thus all employers experienced some degree of cost-saving incentives under workmen's

¹⁰⁹ Moss, *Socializing Security*, 69. While the policy particulars of workmen's compensation in its early years varied by state, the kind of incentive Commons identified was present in some form in nearly every U.S. state's compensation legislation, in that states individualized employers' costs for employee injuries to some extent. For example, while Ohio, Virginia, Washington, and Oregon had state monopoly insurance plans, Ohio and Virginia permitted self-insurance and Washington and Oregon experience rated employers' premiums. For a concise summary of the differences between different states' compensation laws in the early years of workmen's compensation, see Price Fishback and Shawn Kantor, *A Prelude to the Welfare State: The Origins of Workers' Compensation* (Chicago: University of Chicago Press, 2000), 103-104. For a very detailed treatment of the specifics of these laws, see Barbara Armstrong, *Insuring the Essentials* (New York: MacMillan, 1932), 251-281.

compensation, incentives employers could respond to by either safety measures or hiring changes.¹¹⁰

Of course, incentives only encourage rather than guaranteeing or compelling behavior. It is not clear exactly how often employers changed their hiring practices in response to the incentives created by workmen's compensation or how many people were fired or passed over for hiring as a result.¹¹¹ Companies themselves may not have had information on the demographic factors that made employees into relatively greater potential liabilities under compensation laws. Prior to the creation of discriminatory

¹¹⁰ Arguably, had workmen's compensation laws not contained such a cost structure, they would have incentivized or at least subsidized employers with more dangerous workplaces at the expense of employers with safer workplaces.

¹¹¹ The U.S. census did not collect information on the employment of people with physical impairments, such that those people's employment was largely invisible within the census. It is likely that these people were the most discriminated against in employers' responses to compensation laws. The data is unclear regarding employment discrimination based on age. Data from the 1920 and 1930 censuses show a modest decline in the "gainfully employed" rate for men over 44 years of age (hereafter 'older men'), relative to that of men aged 25 to 44 (hereafter 'younger men'). In 1920, 91% of older men reported themselves as gainfully employed, while 96.8% of younger men so reported. In 1930, 85.8% of older men reported as gainfully employed, compared to 97.2% of younger men. These numbers calculated based on the numbers of gainfully employed and the population figures in the 1910, 1920, and 1930 censuses, respectively. *Thirteenth Census of the United States Taken in the Year 1910*, Vol. IV. *Population: 1910. Occupation Statistics* (Washington, D.C.: GPO, 1914); *Fourteenth Census of the United States Taken in the Year 1920*. Vol. IV. *Population: 1920. Occupation* (Washington, D.C.: GPO, 1923); *Fifteenth Census of the United States Taken in the Year 1930*. Vol. IV. *Population: 1930. Occupations, By States* (Washington, D.C.: GPO, 1932). These changes are not huge, but they do indicate a decline in older men's employment nationally. These numbers are ultimately inconclusive with regard to employment discrimination based on age, however, for two reasons. There were likely other factors contributing to changes in older men's employment; injury law reform was probably one factor among a great many. Furthermore, the category of "gainfully employed" as it was used in the 1910, 1920, and 1930 censuses makes it difficult as an indicator of the presence or absence of employment discrimination along the lines discussed in this chapter. In these census years, a person counted as "gainfully employed" if he or she was either employed or self-reported as "willing and able to work." See Robert M. Coen, "Labor Force and Unemployment in the 1920's and 1930's: A Re-Examination Based on Postwar Experience," *The Review of Economics and Statistics*, vol. 55, no.1 (1973): 46-55; 46. Thus the census data on gainful employment is not representative of how much people actually did or did not work as employees. In addition, people who lost their jobs or became less employable in response to changes in injury law were more employable prior to those changes. As protests by workers and unions demonstrate, those workers probably tended to see themselves as willing and able to work, and so may have reported themselves as such to the census, in a way that hid their lack of work.

incentives via workmen's compensation, employers had less reason to collect information of employees' physical condition.

Self-selection by applicants further obscures the full impact of workmen's compensation on labor markets. In a 1914 study the Ohio Industrial Commission sought to ascertain the degree to which workers' employment prospects had changed due to Ohio's recent compensation law. The commission surveyed forty companies employing a total of about 65,000 people. Of these, 29 companies reported screening applicants based on assessments of susceptibility to injury.¹¹² The reporting companies rejected about four percent of applicants "owing to physical inefficiency." As the report noted, the actual numbers of people turned away were higher, but unrecorded, because reported figures on rejections included only those who were screened and evaluated as an unacceptable hire. That is to say, the figures collected in the survey reflected only rejection of "those who have prospects of securing employment. Applicants who are maimed, or in poor physical condition or undesirable for the work, are usually rejected by the employment officer" without a screening occurring. "In such cases, of course, no record appears."¹¹³ An official at International Harvester voiced a similar line of reasoning, saying that International Harvester experienced "quite a considerable decrease in rejections" since it first began screening applicants, a change he attributed to self-selection by applicants. Initially "many men applied for employment who were physically unable to perform the work assigned to them, but later as it became bruited [sic] about that examinations were

¹¹² *Bulletin of the Industrial Commission of Ohio* vol. 2, no. 1 (January, 1915), 8.

¹¹³ *Bulletin of the Industrial Commission of Ohio* vol. 2, no. 1 (January, 1915), 12.

required, those who knew themselves to be physically unfit did not apply.”¹¹⁴ Thus, any figures on the numbers of job applicants turned away due to age and disability did not reflect the self-selection that job-seekers likely made in response to employers’ changed hiring practices, such that significantly more people found themselves with worsened employment prospects under workmen’s compensation laws than are enumerated in the already fragmentary and incomplete records of rejections.

If employers paid for the costs of their employees’ injuries, the theory went, employers would seek to economize by introducing safety measures. Unfortunately, the incentive structure written in to compensation laws only really incentivized cost-savings. Safety measures were not the only cost-saving measure available; employers could also change who they hired in order to avoid individuals who they believed were especially likely to be expensive to injure. Employers would soon face further changes in their legal environment, changes which made employers even more likely to discriminate, as the next chapter argues.

¹¹⁴ H. Guilbert to E.F. Carry, April 29, 1924. Administrative Subject Files, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Box 1, Folder 14, Newberry Library, Chicago, Ill.

Jack London, 1912.

"I took it into my head to go tramping. On rods and blind baggages I fought my way from the open West, where men bucked big and the job hunted the man, to the congested labor centres of the East, where men were small potatoes and hunted the job for all they were worth. And on this new blond-beast adventure I found myself looking upon life from a new and totally different angle. I had dropped down from the proletariat into what sociologists love to call the "submerged tenth," and I was startled to discover the way in which that submerged tenth was recruited.

I found there all sorts of men, many of whom had once been as good as myself and just as blond-beastly; sailor-men, soldier-men, labor-men, all wrenched and distorted and twisted out of shape by toil and hardship and accident, and cast adrift by their masters like so many old horses. I battered on the drag and slammed back gates with them, or shivered with them in box cars and city parks, listening the while to life-histories which began under auspices as fair as mine, with digestions and bodies equal to and better than mine, and which ended there before my eyes in the shambles at the bottom of the Social Pit.

And as I listened my brain began to work. The woman of the streets and the man of the gutter drew very close to me. I saw the picture of the Social Pit as vividly as though it were a concrete thing, and at the bottom of the Pit I saw them, myself above them, not far, and hanging on to the slippery wall by main strength and sweat. And I confess a

*terror seized me. What when my strength failed? when I should be unable to work
shoulder to shoulder with the strong men who were as yet babes unborn? ”¹¹⁵*

¹¹⁵ Jack London, *War of the Classes* (New York: Macmillan, 1905), 272.

Chapter Five. “He must pay for two eyes though he took but one”: Physically Impaired Workers’ Lawsuits, Expanded Liability, and Employers’ Disabling Response to Risk

Employers began to gatekeep access to employment in response to the change in injury liability brought about by workmen’s compensation laws. Legal allocation of injury costs shaped the ways employers decided which people were too risky to hire. Legislation was not the only form of injury cost re-allocation. While compensation laws were intended to remove courts from the handling of injuries, courts played a role in further changes in liability and cost allocation after compensation laws, as this chapter argues. The chapter focuses in particular on lawsuits brought by physically impaired individuals after the passage of compensation laws.

In 1913 Charles Weaver suffered a crowbar blow to his left eye. Two years later, I.B. Jennings fell from a wagon while at work and tumbled twenty feet down a steep, rocky embankment. That same year a metal shaving struck Eugene Branconnier in the eye. Each of these men had only one eye before these injuries; each was left blind as a result. The three men filed workmen’s compensation claims that their employers contested, resulting in lawsuits. Despite the similarities of their injuries, each man would receive a different amount of compensation based on a different reasoning process.¹ The

¹ On Weaver, see *Weaver v. Maxwell Motor Co.*, 152 N.W. 993 (Mich. 1915). On Jennings, see A.B. Funk, Industrial Commissioner. Report of the Workmen’s Compensation Service for the Biennial Period Ending June 30, 1918, p27. Des Moines: State of Iowa, 1918. On Branconnier, see *The Weekly Underwriter*, September 25, 1915, Volume 93, No. 13, 402. In a 1930 study, attorney Lloyd Wilford found that only 648

outcomes of these suits further transformed the allocation of the financial risks of employee injury, and in response employers became even more discriminatory against disabled job applicants and employees.

People like Charles Weaver, I.B. Jennings, and Eugene Branconnier did not fit neatly in the frameworks of workmen's compensation laws. These laws were not written to deal with the injuries and risks of employees who already had physical impairments. Workmen's compensation laws were written for able-bodied workers who became disabled, not for disabled workers who suffered further disabling injury. As the Iowa State Supreme Court put it in 1925, "[o]ur state legislature seems to have fixed the basis of compensation, having in its legislative mind a standard or normal man with a body and all members thereof in a serviceable condition."² The court's observation here did not rest on any explicit statement within the Iowa compensation law but rather on the lack of any procedure for dealing with injuries to people with disabilities. This observation was generally true of other states' workmen's compensation laws as well. For example, the Illinois compensation law defined permanent total disability as the complete loss (or loss of use) "of both hands, or both arms, or both feet, or both legs, or both eyes."³ As with the Iowa statute, this language did not stipulate if this loss had to occur in one accident – that is, one single incident that destroyed or incapacitated two hands – or if the loss could

out of 16,141 compensation cases had been contested. Lloyd Wilford, *The Administration of Workmen's Compensation in Minnesota* (Minneapolis: University of Minnesota Press, 1930), 17. It is likely that employees with disabilities prior to their injuries had their cases contested more often than employees able-bodied prior to injury. For a study on the administration of compensation laws in Illinois, see Samuel Harper, *The Law of Workmen's Compensation: The Workmen's Compensation Act with Discussion and Annotations, Tables and Forms* (Chicago: Callaghan and Company, 1920).

² *Pappas v. N. Iowa Brick & Tile Co.*, 206 N.W. 146 (Iowa 1925).

³ Harper, *The Law of Workmen's Compensation*, 534.

be the result of two successive injuries, or the result of a one-handed person losing one hand. This ambiguity did not occur for injuries to people who were physically unimpaired prior to injury. The law was only ambiguous here when it came to people with physical impairments. Already impaired workers were in an important sense not included in the normative category of worker as defined under workmen's compensation laws.

Compensation laws here reflected what Barbara Welke has called the abled character of American law more generally, which means that the normative legal person, the person assumed by law, is able-bodied.⁴ In light of the widespread employment of people with disabilities, compensation laws' assumption that the normal worker was able-bodied did not fit the realities of American economic life.

The legal abnormality of disability in injury law combined with high rates of injury and the labor market participation of disabled people often led to lawsuits when disabled workers suffered further disabling injury. Many state supreme courts heard cases involving plaintiffs who were already disabled and subsequently suffered workplace injuries that created additional disabilities, people like Charles Weaver, I.B. Jennings, and Eugene Branconnier.⁵ These men's injuries fell across the categories of disability as defined in workmen's compensation law. Loss of one eye was typically classified under workmen's compensation laws as a permanent partial disability. Blindness was generally

⁴ Barbara Young Welke, *Law and the Borders of Belonging in the long Nineteenth Century United States* (Cambridge and New York: Cambridge University Press, 2010).

⁵ For a discussion of some of these cases, see Rachel Marks, "Effects of Early Workmen's Compensation Legislation on the Employment of the Handicapped, 1897-1915," *The Social Service Review* vol. 25, no. 1 (March 1951): 60-78. Marks was an early historian and critic of compensation laws' effects on people with disabilities whose work has not been taken up more broadly in the study of workmen's compensation. I became aware of Marks's work via Sarah Rose, "No Right to be Idle," 211-216.

classified as a permanent total disability. People who were blinded by the loss of one eye met the criteria for both categories, partial and total disability, yet these categories were meant to be exclusive. The heart of the matter for courts was, in the words of Iowa Supreme Court Justice William D. Evans, “whether our Workmen’s Compensation Act establishes a fixed value for the loss of one eye, regardless of whether the eye thus lost is the only eye of the injured party.”⁶ In deciding whether to require employers to pay injured workers the lower compensation for partial disability or the higher compensation for total disability, courts had to decide if the injured should be compensated for the quantity of body lost or for capacity lost.

Charles Weaver’s court case turned in part on whether or not he was partially or totally disabled, a difference with important financial ramifications. The Michigan compensation law was in many respects typical in how it handled partial and total disability.⁷ While the specific numbers varied slightly, states used the same basic framework. An injured person would get a weekly payment for some number of weeks. The numbers of weeks that the injured party would receive this payment varied with the severity of the injury. Someone totally disabled would receive the statutory maximum number of weeks of payments. Total disability was defined as a disability preventing the injured party from finding waged work ever again in the future. People partially disabled would receive some quantity of weeks pay below the maximum duration,

⁶ *Jennings v. Mason City Sewer Pipe Co.*, 174 NW 785 (Iowa 1919)

⁷ For comparisons of different states’ rules for permanent partial disability and permanent total disability, see F. Roberston Jones, *Digest of Workmen’s Compensation Laws in the United States and Territories, with Annotations* (New York: F. Roberston Jones, 1921).

depending on how serious their injury was judged to be. The amount of the weekly payment was set by statute as some percentage of the injured person's normal weekly wage. In Michigan the weekly payment was fifty percent of the employee's normal wages, and the maximum duration was three hundred weeks. A person in Michigan blinded by the loss of two eyes counted as totally disabled. For the loss of a single eye, the Michigan law specified that the injured worker would receive payments for one hundred weeks. The Michigan law also set the maximum weekly payment at ten dollars a week, and set the total injury compensation maximum at four thousand dollars. For an employer, then, the difference between partial and total disability meant the difference between making payments for one hundred weeks or three hundred weeks, a difference somewhere between sixteen hundred and three thousand dollars.⁸

The Michigan State Supreme Court ultimately ruled in 1915 that while blinded, legally speaking Charles Weaver's employer was only liable for his being partially disabled. The 1913 accident to his left eye had blinded him because an accident seven years earlier had left Weaver blind in his right eye. As such, the court decided, he had suffered two different partially disabling injuries, only one of them at his 1913 job.⁹ Weaver's 1913 employer, the Maxwell Motor Company, was thus liable only for the loss of a single eye; any further costs to Weaver due to his disabled condition were his responsibility and not his employer's. Along similar lines, in 1915, the Minnesota Supreme Court ruled that John Garwin's loss of his only eye did not count as permanent

⁸ Quoted in *Weaver v. Maxwell Motor Co.*, 152 N.W. 993 (Mich. 1915) The statute guaranteed a minimum weekly payment for the totally disabled of four dollars.

⁹ *Weaver v. Maxwell Motor Co.*, 152 N.W. 993 (Mich. 1915)

total disability. The Minnesota court's decision was easier than the decisions of other courts, because Minnesota's workmen's compensation law stated that "[i]f an employee receives an injury, which, of itself, would only cause permanent partial disability, but which, combined with a previous disability, does in fact cause permanent total disability, the employer shall only be liable for the permanent partial disability caused by the subsequent injury." Therefore, the Minnesota court could only hold that Garwin's blinding was, for the purposes of the law, a partial disability. Garwin's blindness was a total disability in fact, but a partial disability at law.¹⁰

The Iowa State Supreme Court ruled differently for I.B. Jennings.¹¹ The Iowa court argued in its decision in *Jennings v. Mason City Sewer Pipe Co.* that Jennings clearly could not be counted as only partially disabled. The court wrote that doing so would give Jennings only 100 weeks of compensation, and that to grant

[o]ne hundred weeks of compensation to a man condemned to grope in darkness the rest of his natural life is so grossly inadequate to the loss he has sustained as to make such settlement nothing less than monstrous. It seems impossible that any legislature in the United States should have ever intended to countenance such dealing with the unfortunate victim of industrial accident had it anticipated the effect.¹²

¹⁰ *State ex rel. Garwin v. District Court of Cass County*, 151 N.W. 910 (Minn. 1915). Minnesota was one of a sizable minority of states with provisions to this effect. As of 1921, other states with these provisions included Alabama, Georgia, Indiana, Missouri, Nebraska, New Mexico, Tennessee, Texas, and Wyoming. See F. Roberston Jones, *Digest of Workmen's Compensation Laws in the United States and Territories, with Annotations*, 21, 73, 106, 188, 201, 228, 307, 315, and 373, respectively.

¹¹ *Jennings v. Mason City Sewer Pipe Co.*, 174 NW 785 (Iowa 1919). The Iowa court's reasoning largely follows that suggested by Iowa's Attorney General Henry Sampson in 1914. See "Iowa Confronted by Problem of the One Eyed Workman" in the *National Compensation Journal*, vol. 1 no.8 (August, 1914): 3-4; 3. It is reasonable to assume that the Iowa Court was familiar with and convinced by Sampson's arguments.

¹² *Jennings v. Mason City Sewer Pipe Co.*, 174 NW 785 (Iowa 1919)

While compensation legislation generally defined disabilities resulting from injury then listed the compensation required, the Iowa court's assessments of the legal status of Jennings's injury seems to have been motivated by how much money the court thought he should receive.

Even though the Iowa court did not think 100 weeks of compensation was enough, at the same time the court argued that Jennings should not receive the full compensation that workers compensation law stipulated for permanent total disability, 400 weeks of payments. To give Jennings 400 weeks of payment, the court held, would be to hold his employer unfairly liable for the loss of both of Jennings's eyes. In the end, the Iowa court split the difference. The court took the statutorily stipulated compensation for blindness and other forms of permanent total disability, 400 weeks of payments, and subtracted the value of loss of one eye, 100 weeks of payments. The court thus decided to give Jennings 300 weeks of payments, a ruling somewhere between partial and total disability. Since Jennings was blinded by the loss of one eye, the court allocated Jennings more compensation than the norm for the loss of one eye and less compensation than the norm for blinding.

The New York Court of Appeals handled these kinds of injuries differently. In 1914 Jacob Schwab lost his right hand in a workplace accident. The 1914 accident left him handless, since Schwab had lost his left hand in 1892.¹³ The 1915 decision of the New York Court of Appeals held that Schwab should be compensated for his total post-injury condition – his being rendered handless – rather than the loss of one hand. The

¹³ *Schwab v. Emporium Forestry*, 153 N.Y. Supp. 234 (N.Y. App. Div. 1915)

court thus considered him permanently totally disabled. The Massachusetts Supreme Court approvingly cited the Schwab case in its 1916 decision in Eugene Branconnier's case. The Massachusetts court ruled that Branconnier had been blinded by the loss of his only eye. The court said Branconnier, upon beginning work,

had that degree of capacity which enabled him to do the work for which he was hired. That was his capacity. It was impaired capacity as compared with the normal capacity of a healthy man in possession of all his faculties. But nevertheless it was the employee's capacity. It enabled him to earn the wages he received. (...) The total capacity of this employee was not so great as it would have been if he had had two sound eyes. His total capacity was thus only part of that of the normal man. But that capacity, which was all he had, has been transformed into a total incapacity by reason of the injury.¹⁴

Since Branconnier had lost all of the ability he had had, he ought to be considered totally disabled and his employer ought to be liable for Branconnier's total disability. The basic point in the New York decision for Jacob Schwab's case and the Massachusetts decision for Eugene Branconnier was that in cases of compensation for workplace injuries employers should be liable for the total post-injury condition of the injured.

Each of these cases involving injuries to employees with disabilities dealt with the allocation of liability. In each of these case, the employers believed they should be required to pay on a socially average cost, in the sense that they should only have to pay for what the injury would have been had the employee been able-bodied. The Michigan and Minnesota courts agreed with this line of reasoning, with the result that the additional

¹⁴ Quoted in William R. Schneider, *The Law of Workmen's Compensation: Rules of Procedure, Tables, Forms, Synopses of Acts, Volume 2* (St. Louis: Thomas Law Book Company, 1922), 1069. It is worth noting here that the court implied that Branconnier had lower than normal ability and that his wages reflected this condition. The court here presumed both the inclusion of people with disabilities in employment and their subordination.

disability suffered by injured disabled people would be borne by those individuals and their families. In each of these cases the injured disabled plaintiffs argued that their employers should be required to pay for their total post-injury condition. The New York and Massachusetts courts agreed, with the result that employers would pay for the above-average disability suffered by injured disabled people. While these court cases differed in how they allocated the differential in liability, they all agreed that liability was to fall with either one or the other party, with either the injured plaintiff employee or the defendant employer. The Iowa court differed here, however, breaking up the risk differential regarding injury to a disabled employee, apportioning some to the employee and some to the employer.

Discriminatory thought against the disabled played an important role within the more individually generous decision in Jacob Schwab's case. Even though the New York court issued a decision favorable to an individual disabled plaintiff, the assumption that disabled persons were worth less than an able bodied person played a crucial role in the court's decision. A central presupposition to the New York court's reasoning was that a one-handed worker would provide "less efficient service" and thus receive lower wages. The court compared two hypothetical workers. If a two-handed worker earned twenty dollars per week then the loss of a hand would have been worth over \$3500, because "[t]he method of payment of compensation for the loss of one hand [was] to allow sixty-six and two-thirds per centum of the salary which the injured party was earning for 244 weeks." The court presumed its hypothetical one-handed worker to earn "say \$10 a

week.” Such a worker on losing the sole remaining hand would receive under the same formula only around \$1600. A one handed person’s hand should be more than doubly valuable, not half as valuable, the New York court reasoned. To say otherwise would be an “anomalous result” that obviously “the Legislature could not so have intended.”

“If a man has two hands,” the opinion in Schwab reads, “he is presumably a more efficient worker and can receive higher wages than if crippled by the loss of one hand.”¹⁵

The court assumed that a one-handed worker’s single hand would be more valuable to that worker, and that that worker would be less efficient and thus receive less wages than a two-handed worker. If the one-handed worker lost his remaining hand, then the doubly valuable hand would be compensated at half the value of one hand belonging to a previously two-handed worker. The court found that conclusion unacceptable, because the discrepancy was too great. The New York court’s arguments explicitly began from a working assumption of wage inequalities for disabled workers. Furthermore, the court appears to have found the practice legitimate, since the court used wage differentials between the disabled and the able bodied in order to make its arguments. In doing so, the court conceptually reified labor markets, taking them as fixed in order to think, and so helped present those labor markets as just and as taken for granted.

The New York court’s hypothetical one handed and two handed workers were both totally disabled, since both suffered an accident leaving them with no hands. At the same time, the worker who lost two hands would receive more money - not because of the greater injury but because of higher pre-injury wages.

¹⁵ *Schwab v. Emporium Forestry*.

As the man with one hand is presumably earning less wages than a man with two hands, to allow for the loss of the second hand as a permanent total disability, a percentage of the weekly wage that he was then earning would be in complete harmony with compensation to one who had lost both hands by the accident, who receives his sixty-six and two-thirds per cent upon the greater wages that he was earning at the time of the accident.¹⁶

Workmen's compensation law stated that compensation would take the form of so many weeks pay at a fraction of the injured workers original wage. The law, and by extension the courts, effectively stated that the bodies of lower-paid workers were worth less than those of higher-paid workers. The New York court awarded Jacob Scwhab greater compensation than some other courts awarded disabled workers in similar cases. At the same time, the court assumed that employment discrimination against disabled people (discrimination in the form of paying lower wages to disabled workers) was fair and reasonable. The ruling in favor of Jacob Schwab awarded greater compensation to an individual disabled person through a process of reasoning that affirmed elements of employment discrimination against disabled people.

In looking back at these decisions and their handling of disabled people's injuries it is easy to see the courts that gave plaintiffs lower damage awards as parsimonious or unjust and to see the courts that gave plaintiffs higher awards as more generous and more just. It might be tempting to see this as a matter of judicial priorities, wherein some judges unjustly put profits and property over people. This may have been the case but it is important to note that the courts that found against disabled plaintiffs made their decisions in part based on claims about the welfare of disabled people as a population.

¹⁶ *Schwab v. Emporium Forestry*.

The Iowa court based part of its claim that I.B. Jennings ought to not receive the same amount of compensation for his blinding as a two-eyed man on the idea that otherwise employers would stop hiring one-eyed men. To count Jennings' employer as liable for his full disability would

place a serious handicap upon the defective workman in search of employment, for while an employer might be willing to compensate him for more than 100 weeks, due to the fact that his taking from the workman a member which represents total eye-sight and which is therefore more valuable than one eye, yet he would certainly not be willing to employ him if it might mean that he must pay for two eyes though he took but one.¹⁷

The Minnesota court similarly commented on the Minnesota legislation which required that John Garwin's blinding only count for purposes of legal liability as a partial disability. The court said that

The employer accepts in his service a disabled employee, knowing of the disability and with the knowledge that under the compensation statute he is liable for accidental injuries to such employee while engaged in his service, but to couple the prior disability with one suffered while in his service and make the employer liable for both, would seem a hardship the legislature intended to avoid.

What is more, the court added, if employers were responsible for the entire disability resulting from injuries to disabled workers, it "would tend only to embarrass partially disabled laborers from securing employment, for employers would be reluctant to engage them if there was a contingent liability to make compensation for injuries previously suffered by them."¹⁸

¹⁷ *Jennings v. Mason City Sewer Pipe.*

¹⁸ *Garwin v. District Court.*

In these decisions, the Minnesota and Iowa courts made their decisions, or at least justified their decisions, in terms of the relationships between individuals and aggregates. Concerns for people with physical impairments as a population justified lower injury compensation for injured individuals. Higher compensation for injured individuals based on their greater individual injury risk, these courts reasoned, would result in a new unemployment risk for people with disabilities in the aggregate. This demonstrates that courts too could manage risk and think in aggregates. This also demonstrates that the management of one sort of risk could cause the proliferation of other risks.

The New York and Massachusetts courts were more generous with Jacob Schwab and Eugene Branconnier as individuals. These courts' decided that employers would bear a higher proportion of the financial risk with regard to injuries to employees with disabilities. These and similar decisions confirmed the arguments by the Iowa and Minnesota courts that it would cost more money to injure disabled workers than to injure able-bodied workers. These and similar legal rulings had the effect of producing disabled people as particularly expensive employees to injure and so people for employers to screen out. In a decision after *Schwab v. Emporium*, the New York Court of Appeals recognized this, stating that the *Schwab* decision made the Workmen's Compensation law "a hindrance to those who, having lost a hand or other member, sought to become employees under the act, because the loss of the remaining member subjected the employer to the payment of a compensation substantially greater than it would in case the

employee had had the two members.”¹⁹ The New York court made its decisions to grant higher individual awards to injury plaintiffs despite the effects these decisions would have on people with disabilities as a group.

Over time, the rulings like those in New York and Massachusetts became the legal norm. These decisions were in an important sense more equitable in that they meant that workers with disabilities, like abled-bodied workers, were entitled to compensation for their total condition after injury. Yet, in the context of the re-allocation of workplace injury risk under workmen’s compensation, these more formally equitable decisions that raised the costs of disabled people’s injuries resulted in employment discrimination. In 1925, the Oklahoma Supreme Court heard *Nease v. Hughes Stone* and the Oklahoma court ruled, using reasoning like that of the New York and Massachusetts courts, that W.A. Nease had been blinded by the loss of his only eye, and that his employer was responsible for the full costs of his condition.²⁰ I.K. Huber, an official of the Oklahoma based Empire Companies, argued that as a result “thousands of one-eyed, one-legged, one-armed, one-handed men in the State of Oklahoma were let out and can not get employment under the workmen’s compensation law of Oklahoma.”²¹ Some courts’ apparently more just and generous handling of lawsuits brought by injured disabled people had had discriminatory consequences. After these changes in injury law, to lack one hand or one eye or to have a similar physical impairment was to be someone

¹⁹ *State Industrial Commission v. Newman et al.*, 118 N.E. 794 (N.Y. App. 1918)

²⁰ *Nease v. Hughes Stone*, 114 Okla. 170 (1925)

²¹ United States Bureau of Labor Statistics, *Bulletin of the Bureau of Labor Statistics* 536 (1931), 268. Huber’s comments are important for indicating that at least some business officials had moral reservations about the exclusion of people with disabilities.

employers refused to hire. This meant that a two handed person who lost one hand would be compensated for a partial disability, and yet might well be unable to find any employment afterward. What the law called (and compensated as) partial disability had become in reality a total disability in the sense that someone with that condition would be unlikely to find employment.

In the aftermath of compensation laws one-eyed men sometimes stood as symbols for the problem of discriminatory pressures under workmen's compensation. Workers and unions repeatedly spoke out about compensation laws, "emphasiz[ing] especially the danger of loss of employment in the case of men having only one eye. Persons so afflicted are often just as capable as ever to earn full wages, but as they have only one eye remaining they are peculiarly exposed to complete blindness."²² Exposure to a greater chance of blindness made one-eyed people more risky to hire under workers' compensation statutes. A workplace accident that cost a worker sight in one eye was more expensive to employers if the employee only had one sighted eye to begin with. As corporate lawyer J.O. Boyd put it:

The law has placed a handicap upon those who have only one eye. (...) The insurance inspector will look over your plant and if he sees the one-eyed man, the man with the wooden leg, the man with the varicose veins, and the old man, he will tell you that each and all of these make your rate higher and that your insurance rate will be reduced if you do not have these employes (sic) the next time he comes around. ... This, I say, is contrary to public policy. It is wrong. ... By the unvarying rule of business competition you will be forced to dispense with the services of every employe (sic) who in any way has a tendency to make your insurance higher. No state can afford to handicap a given class of citizens. Every citizen, every worker, every employe (sic), has a right to stand before his

²² Garst, *First Biennial*, 7.

employer without handicap other than that with which nature may have burdened him.²³

It is worth noting that the “handicap” that “burdened” many working class people was one acquired over the course of employment in the dangerous and physically demanding workplaces common in the early 20th century United States.

Iowa’s Industrial Commissioner Warren Garst argued that in his view “the Iowa law did not intend that the loss of a second eye should put the burden of compensating for total blindness on the last employer.” He argued that “on any fair consideration the benefit to the comparatively few suffering total blindness in this would be far out-balanced by the loss of wages and employment on the part of a far greater number classed as “impaired risks.”²⁴ Garst argued that full liability on the part of employers would result in

many who, suffering no second loss of eyesight, would nevertheless be thrown out of employment because of the greater risk of retaining them. The loss of wages for the many would be as a thousand to one what a few might receive in compensation. The case of a man losing a second eye was a representative one but with every inquiry I found there was more occasion over the loss of employment by the nine hundred and ninety-nine rather than over the failure of the one to get compensation. This anxiety was only increased when I inquired into the experiences of other countries and states, and considered other classes of employes (sic) who though good workers were deficient physically, or were as the insurance interests term them, “impaired risks.”²⁵

Garst quoted an Iowa factory owner:

We have one man who has been retained in the employ of the company for philanthropic reasons more than on account of his proficiency, who is a paralytic,

²³ Garst, *First Biennial*, 6-7. Ellipses in original.

²⁴ Garst, 7.

²⁵ Garst, 8.

which you understand increases the hazard incident to his employment. We also have a fireman with only one eye. He is an efficient employee but, of course, the loss of the eye increases the hazard incident to his employment. We have said nothing to these men, but we do not feel that we are justified in retaining them in our employ if they intend to accept the privileges of the Compensation Act, as this requires the company to assume all of the additional hazard on account of their physical condition. We are willing to retain both of these men if we can be relieved of this additional hazard, and they should see fit to reject the benefits of the Act.²⁶

In his 1920 survey of workmen's compensation laws actuary Carl Hookstadt aptly summarized the dilemma of risk allocation for injuries to workers with disabilities, taking one-eyed employees as the paradigm case for "physically defective workers." "When a one-eye workman loses the second eye in an industrial accident," Hookstadt wrote

he will be totally disabled for life. If the employer is required, under the law, to pay compensation for permanent total disability in such cases he will feel considerable apprehension about employing such men. On the other hand, if the employee is to receive compensation for the loss of one eye only, regardless of the resulting disability and loss of earning capacity, he will be inadequately compensated and the purpose of the compensation act will be partially defeated.²⁷

Hookstadt noted that injuries to employees who already had physical impairments were "infinitesimally small" statistically speaking. He cited an unnamed statistical study which found "that of all the employees under the compensation act in the State of Wisconsin who had lost a hand, an arm, a foot, a leg, or an eye, only one would sustain a second major injury in any given year."²⁸ Hookstadt said that even under the assumption "that all second major permanent disabilities would result in permanent total disability" - that is,

²⁶ Garst, 7.

²⁷ Carl Hookstadt, "Comparison of Workmen's Compensation Laws of the United States and Canada up to January 1, 1920," *Bulletin of the United States Bureau of Labor Statistics* No. 275, 71.

²⁸ Carl Hookstadt, "Comparison of Workmen's Compensation Laws," 73.

assuming that all injuries to already disabled employees removed all of those employees' remaining capacity to work - "the increased compensation cost of such accidents would probably in the aggregate not exceed three-tenths of 1 per cent of the total compensation costs for all accidents." Statistically speaking, in the aggregate, injuries to employees with disabilities were minuscule in occurrence and cost. And yet, "an individual employer is not particularly concerned with the fact that "in the aggregate" the increased cost of second disabilities is insignificant," wrote Hookstadt. "When a crippled workman in his employ sustains second major disability the increased cost to him is much greater than the cost of a similar disability to a normal worker would be, and this notwithstanding the fact that the increased aggregate cost is negligible."²⁹

Though he did not pose the issue in this way, Hookstadt's remarks get to the heart of the issue built in to workmen's compensation legislation. The laws sought to provide security to working people in a way that secured the reproduction and maintenance of working people and labor markets over all. The mechanism that the laws used to provide this security rested on employers. Lawmakers aimed at aggregate social security; employers were not primarily or fully interested in aggregate security because they did not operate at the level of society as a whole. Businesses were not society; they were actors within society. Businesses' interests in security under workmen's compensation were not toward securing society. Rather, businesses practiced actuarial forms of security, in which they sought to shed risks, reducing their own share of total social risk

²⁹ Hookstadt, "Comparison of Workmen's Compensation Laws," 74.

and the costs of risk management.³⁰ That orientation toward having a small organizational share of total social risk was not the same as providing the greatest amount of total social security. As a result, workmen's compensation laws produced an aggregate security with numerous fissures. After lawsuits raised the costs of injuries to employees with disabilities, those employees fell into these cracks in the edifice of security provided by compensation laws.

Businesses sometimes took one-eyed individuals as symbols of unacceptable hires as well. In 1934 David Crawford of the Chicago-based Pullman Company argued for expanding employment discrimination at Pullman. Crawford said that "there is just as good reason" for discriminating against workers with illnesses "as there is for not taking on a new one-eyed man."³¹ Even if injuries to one-eyed employees were rare and relatively inexpensive in the aggregate, individual firms like Pullman did not act in the aggregate, as Carl Hookstadt had lamented.

A 1929 article in the *Bulletin of the United States Bureau of Labor Statistics* helps explain some of Pullman's attention to the problem of one-eyed employees despite the relatively minor nature of the problem from an aggregate perspective. The article, "Eye Conservation Through Compulsory Use of Goggles in Workshops," focused on safety efforts at the Pullman company, with an emphasis on eye injuries. Hookstadt argued that these efforts had saved "the eyes of approximately a thousand of their men" at Pullman.

³⁰ These remarks are informed by Nicholas Barr's discussion of insurance in his *Economics of the Welfare State* (Stanford: Stanford University Press, 1993), 111.

³¹ Memo from D. A. Crawford to L.S. Hungerford, May 31, 1934. Employee and Labor Relations, Medicine and Sanitation, Administrative Subject Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

Thus the increased risk due to one-eyed employees' injury costs prompted policy changes at Pullman directed toward injury-prevention measures, in line with the theory that compensation laws incentivized safety. Pullman officials estimated the cost of an eye at \$3,300 which would make this a savings of over three million dollars. The article cited Pullman officials' reasons for the goggle requirement as "the experience of Pennsylvania and New York in recent years (...) In Pennsylvania up to October, 1927, the sight of 6,842 eyes had been completely destroyed in industrial accidents since 1916, while from January 1, 1927, 383 eyes had been made sightless."³² Eye injuries seemed quite common, and Pullman officials worried about their frequency – especially in light of their potential cost to the company. In just one year compensation paid for eye injuries in Pennsylvania ran over eight hundred thousand dollars, "representing an estimated total economic loss of \$5,000,000." Compensation for eye injuries in New York were even higher, 1.7 millions dollars. "According to the National Safety Council's estimate that the total cost of industrial accidents is five times the amount of the compensation payments, this class of accidents cost the workers, the employers, and the public more than \$8,000,000 in the single year."³³

Crawford invoked a history of company policy in his invocation of one-eyed employees as the paradigm case for an undesirable hire. Pullman had stopped hiring one-

³² "Eye Conservation Through Compulsory Use of Goggles in Workshops," *Bulletin of the United States Bureau of Labor Statistics*, No. 491 (Washington: United States Government Printing Office, 1929), 280-281, 280.

³³ "Eye Conservation Through Compulsory Use of Goggles in Workshops," 281. This is another example of the moral thinning of injury, in that eye injuries were valued in terms of dollars, as opposed to the variety of values and meaning which people gave to their bodies and injury.

eyed applicants in 1922.³⁴ In a company memo to lower management in 1923, Pullman management literally underscored that the company would not hire people with one eye. “Do not accept one-eyed men,” the memo underlined those words, and placed one-eyed applicants first in a list including “men with badly defective eyes and ears, with organic heart disease, with suspected tuberculosis, with nephritis, with mental infirmities, with major deformities, or men who are much undernourished and manifestly below par physically.”³⁵ The ramifications of physical condition for employment arose out of company’s financial priorities in response to their changing legal-economic environment. Initially the prevailing attitude among Pullman officials was to avoid hiring one-eyed applicants but to retain employees who lost an eye after being hired at Pullman. Officials believed the company ought to retain employees who became one-eyed in a work accident and to accept the increased risk that went with retaining these employees.

Company officials repeated the policy with regard to one-eyed applicants more than once over the next several years. In 1925 the company undertook “a canvas (sic) (...) to determine the number of one-eyed employes (sic) now in the service.”³⁶ That

³⁴ Memo from H. Guilbert to E.F. Carry, March 25, 1925. Employee and Labor Relations, Safety and Compensation, Administrative Files, 1927-1968, Pullman Corporation Records, Newberry Library, Chicago, Ill. This policy remained in force for at least twenty years, as it was mentioned in internal correspondence in 1943. Letter June 29, 1943, Graham to J.M. Carry, Employee and Labor Relations, Safety and Compensation, Administrative Files, 1927-1968, Pullman Corporation Records, Newberry Library, Chicago, Ill.

³⁵ Memo from Thomas Crowder to all medical examiners, May 29, 1923. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968; Labor Relations 1942-1964; Medical Examinations, Truck Drivers, and Chauffeurs, 2956-1961, Pullman Corporation Records, Newberry Library, Chicago, Ill.

³⁶ Memo from unknown official to agents and supervisors, July 30, 1925. Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

study found 88 one-eyed Pullman employees.³⁷ Pullman employed approximately 35,000 people at this time but Guilbert still displayed a great deal of concern for these 88 with one eye.³⁸ The internal study of one-eyed employees “found that a great number of these people entered the service after having lost the use of one eye.” The memo reminded Pullman managers and supervisors that “a person with only one good eye is necessarily handicapped so far as usefulness is concerned, and, in view of the hazard connected with work (...) the employment of such persons should be avoided.” The memo went on to name the one-eyed employees under the supervisor being written to. “As to those already in service, they should be required to wear goggles while on duty and instructed to exercise every precaution to protect their one good eye at all times.”³⁹

The requirement to wear goggles became a serious disciplinary issue at Pullman, one involving the highest level of management. In 1925 Pullman’s safety director Harry Guilbert and J.A. Rittenhouse, the superintendent of the Pullman repair shop in Mott Haven, New York, corresponded about Jerry Murphy, a supervisory employee with one eye. Murphy was the head mechanic at the Mott Haven facility and had worked for Pullman for thirty-five years. He had repeatedly been found not wearing goggles as ordered. Guilbert complained to Pullman’s Vice President and General Manager, L.S.

³⁷ Memo from H. Guilbert to H.P. Walden, June 11, 1925. Guilbert first wrote to Pullman supervisors requesting the numbers of one-eyed employees in March of 1925. Guilbert to all supervisors, 3/31/1925. Employee and Labor Relations, Safety and Compensation, Administrative Files, 1927-1968, Eyes – One Eyed Employees. Pullman Corporation Records, Newberry Library, Chicago, Ill.

³⁸ In 1923 Pullman employed 35,825 people. Document, “Labor Turnover, 1923,” Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968; Labor Relations 1942-1964; Medical Examinations, Truck Drivers, and Chauffeurs, 2956-1961, Pullman Corporation Records, Newberry Library, Chicago, Ill.

³⁹ Memo from unknown official to agents and supervisors, July 30, 1925. Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

Hungerford that various managers and supervisors “have talked to [Murphy] repeatedly without very much success. It costs \$3300 for an eye in the State of New York. Should Murphy lose his remaining optic, chances are we will be compelled to pay for total blindness.”⁴⁰ Hungerford replied that Murphy must “take every precaution to safeguard his remaining good eye (...) not only for his own sake but in view of the liability that would probably attach to the company if that good eye should be injured while Murphy was on duty.”⁴¹ J.A. Rittenhouse wrote again saying that Murphy had “shown rather an independent spirit on the question of wearing goggles, claiming they did him more harm than good, that they weakened his one eye, through the heat created by the goggle and frames.” Murphy was probably right, as he would have been best placed to know what the goggles meant for his work and his eyesight, but Pullman management’s primary concern was with the company’s liability. Rittenhouse asked for advice on disciplining Murphy.”⁴² Ultimately the company decided to lay him off for a week without pay, “and if necessary longer” in order to “teach Head Mechanic Murphy that the President’s orders will be obeyed explicitly.”⁴³ Murphy’s understanding of his own safety and comfort at

⁴⁰ Guilbert to Hungerford, August 2, 1926, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill. That Pullman did not simply fire Murphy is curious. This is likely due to his status as head mechanic, which gave him valuable skills that would have made him expensive to replace. Company officials may have also had concerns about the costs of replacing Murphy, given their concerns about the costs of turnover in the mid 1920s, as discussed in Chapter Three.

⁴¹ Hungerford to Tully, August 8, 1926, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴² Rittenhouse to Tully, August 23, 1926, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴³ Tully to Rittenhouse, August 18, 1928, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

work was to be subordinated to his higher-ups' understanding of what might expose the company to injury costs.

One-eyed employees and their legal liabilities remained the topic of managerial discussion at Pullman for some years. In March of 1928 an employee named Gisalle Kopitar filed a compensation claim, arguing that the infection that took the sight in one of her eyes was the result of her work as a car cleaner at Pullman. In discussing her situation, a Pullman official said that since "one-eyed employes [sic] are much more liable to injury than those possessing both eyes (...) it may prove necessary to dispense with her service at a later date after the case receives a hearing. In any event, she would be dismissed if she failed to wear goggles and safeguard the vision of the other eye."⁴⁴ Kopitar lost her compensation claim. By December of 1928, company records listed her as "resigned and is now out of service and will not be re-employed."⁴⁵ Whether she resigned or the company fired her, presumably her filing and losing a claim was a factor in this outcome.

Though upper management worried that some one-eyed applicants had been hired, internal correspondence at Pullman did not indicate how many one-eyed employees had been hired in that condition and how many had become one-eyed while working at the company. In 1931 Pullman officials were again trying to determine how many one-eyed employees there were and whether or not they were suffering injuries.

⁴⁴ Guilbert to Tully, March 22, 1928, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴⁵ Tully to Guilbert, December 3, 1928, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill. I have not found records detailing how Kopitar left her employment at Pullman.

F.R. Callahan, superintendent of Pullman's repair facilities, wrote to lower managers asking for "report of injury to any employe [sic] having but one eye."⁴⁶ Another official replied that "Every district in this service and I think every General Foreman in the service, understand that men with one eye, arm, or crippled in any way should not be employed."⁴⁷ Another added that "[i]t is understood by all concerned that employes [sic] with defective vision or but one eye should not be employed, under any circumstances." The company's internal survey turned up only eight one-eyed employees. Of these, at least one had definitely become one-eyed due to an injury at Pullman, and five were long-time Pullman employees.⁴⁸ This means Pullman had 88 one-eyed employees in 1925 and eight in 1931.⁴⁹

Alongside attention to individual employees, Pullman officials collected information on legal rulings about one-eyed employees and workplace injury law. The attention to one-eyed employees at Pullman, and the exclusion of one-eyed applicants, happened in large part because of Pullman officials' awareness of and concern over liability for injuries to those employees. The company's safety files included an August 10, 1925, article from the *Insurance Press* arguing that "serious eye accidents are likely to occur where men, women and children are employed. There is not any such thing as a

⁴⁶ F.R. Callahan to Rittenhouse, Ransom, et al, March 3, 1931, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴⁷ Ransom to Callahan, March 5, 1931, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴⁸ Rittenhouse to Callahan, March 19, 1931; Dunn to Callahan, March 9, 1931; Vallette to Callahan March 9, 1931, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴⁹ I have not found dismissal records, but it seems likely the company fired at least some of those eighty missing employees.

really non-hazardous occupation.” The company’s safety files included another August 10th, 1925 article, from the *Chicago Journal of Commerce* titled “Illinois Ruling on Injury to Impaired Eye.” The article noted that a recent Illinois Supreme Court decision provided compensation for the loss of employees’ eyes without requiring “that the eye must have been perfect” and without any provision “for reducing the amount of compensation in proportion to the defect in vision. The same compensation is due whether the eye lost is one with perfect vision or imperfect vision by reason of natural defects or previous injury.” Another undated article from the *Underwriters Report*, marked with a handwritten note in the margin, warned employers of “Full Liability Awarded on Loss of Second Eye.” The article discussed a “decision affecting the application of the employer’s liability law in Alaska”, decided by the U.S. Circuit Court of Appeals in San Francisco, “wherein it is ruled that a one-eyed man who loses the remaining eye is entitled to full disability rating.” Thomas Scott, the plaintiff in *Thomas D. Scott v. Killisnoo Packing Company of Alaska*

had only one eye when he went to work for the firm, but the evidence showed that he performed the same work as men with two good eyes, so that when he lost his remaining eye it was contended that he had really suffered complete disability. Scott sued the company under the Alaska employers liability law. The Court held that if Scott, with one eye, was able to perform the work of men with two eyes, the loss of one eye in his case constituted total disability within the meaning of the law.

In 1927 Guilbert wrote to Pullman’s president at the time, E.F. Carry, about a California Supreme Court decision for John Liptik of San Francisco, making employers liable for full blindness in the event of a one-eyed person losing his or her only working

eye. “This is another reason why one-eyed men should be compelled to wear goggles all the time while on duty,” Guilbert wrote. Carry replied with an even stronger statement, saying that “[y]our note (...) in regard to full liability in the loss of the remaining eye by a one-eyed man, emphasizes the necessity of getting rid of all one-eyed men and not employing them.”⁵⁰ Pullman continued to not hire one-eyed applicants until at least 1943. Crawford wrote in 1943 that “[s]o far as concerns the one-eyed people (...) We of course cannot avoid the risk of the one-eyed people that we already have or those who lost their eye in our service, but I would say we would do better to do without.”⁵¹

Judges in lawsuits brought by individuals with disabilities sometimes remarked on the ramifications of their decisions for the employability of people with disabilities. In these remarks judges displayed a sensibility in keeping with what earlier chapters

⁵⁰ Guilbert to Carry, January 3, 1927, and Carry to Guilbert, no date, Employee and Labor Relations, Safety and Compensation, Administrative Files, 1927-1968, Eyes – One Eyed Employees, Pullman Corporation Records, Newberry Library, Chicago, Ill. A year later Guilbert reported to Carry that twenty employees of the New York Central railroad had lost an eye. In 1927 the number was twenty eight, with fifty two employees at the Pennsylvania Railroad losing eyes. Guilbert to Carry, November 26, 1928, Pullman Corporation Records.

⁵¹ Crawford to Carry, May 13, 1943, Employee and Labor Relations, General Labor Files, Pullman Corporation Records, Newberry Library, Chicago, Ill. See also replied 5/13/1943, see also Crowder to Callahan Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968; Labor Relations 1942-1964; Medical Examinations, Truck Drivers, and Chauffeurs, 1956-1961, Pullman Corporation Records. The marginalization of people with disabilities as practiced by executives like Crawford was financially motivated, a matter of indifference rather than conscious antipathy toward people with disabilities. Lizabeth Cohen narrates a similar financial incentive toward discrimination by white home owners against African American would-be home owners in the mid-twentieth century. Cohen quotes a white home-owner opposed to his new black neighbor: “He's probably a nice guy, but every time I look at him I see \$2000 drop off the value of my house.” Lizabeth Cohen, *A Consumers' Republic: The Politics of Mass Consumption in Postwar America* (New York: Knopf, 2003), 217. As David Freund has put it in an illuminating study, state policy “racially structured the market for residential property.” David M. P. Freund, *Colored Property: State Policy and White Racial Politics in Suburban America* (Chicago: University of Chicago Press, 2007), 321. Under this kind of arrangement, a white person would likely have to be actively opposed to racism and committed to equality in order to not oppose housing integration. Similarly, with the extension of injury liability, businesses would have had to have been actively committed to equality for people with disabilities, equality at the expense of profit, in order to avoid acting in line with the incentives to discriminate.

described as social liberalism. Some judges were aware that the allocation of injury risk in employee injury lawsuits brought by people with disabilities had ramifications for the employment of people with disabilities in the aggregate. That awareness seems to have informed decisions to issue lower awards to injured individuals, and courts that issued higher awards were often aware that doing so would encourage employers to discriminate in hiring.

As a result of these decisions, actual employment came to look more like the normative standard in the law: the individual assumed as normal in many states' compensation laws was able-bodied despite the employment of people with disabilities. This created ambiguity for employees with disabilities when they suffered injuries on the job. The resolution of that ambiguity through lawsuits led employers to push people with disabilities out of work, thus making the law in a sense more accurate in its depiction of the workforce, as the norm in the law became enforced by employers in their hiring decisions. More broadly, compensation laws expressed a vision of society within which people with disabilities had no place in market-mediated social reproduction, and helped make that vision more of a reality. Once pushed out of waged labor, people with disabilities had less access to money and so less access to goods and services. Decreased access to wages was thus an important change in the relationship between physically impaired individuals and social reproduction.

In some instances, preference for the exclusion of people with disabilities from employment and from social reproduction was explicit among the people who had

formulated compensation laws. Charles Henderson of the Illinois Workingmen's Insurance Commission, an advocate for workmen's compensation laws, had argued for compensation laws in 1910 in part on eugenic grounds, writing that "we are producing a new set of degenerates" as a result of injuries. These 'degenerates' needed to be "segregated" from the rest of the population in order "to protect the future race," in Henderson's view. After segregation, he said, these accident-created degenerates, like all others, should be eliminated: "what we ought to do is to establish a system in which the State takes those persons who are unfit for propagation and isolates them; then our philanthropy during the next forty or fifty years would segregate the unfit in places where they would be treated humanely but not permitted to propagate. This would, in turn, help to rid society of an endless load and without suffering." Using a eugenics-derived vocabulary of the fit and unfit, Henderson warned that working class people's working conditions and the results of accidents affected future generation of working class people. These conditions could mean that "the children of laboring men" would grow up "unfit for use in our community industries, and for parenthood." As result the United States would have "constantly import larger and larger numbers of men from other countries." If that happened, Henderson warned, "[t]his will retard our civilization."⁵² Henderson clearly believed that people with disabilities ought not to have a role in social reproduction, whether those disabilities were acquired or congenital.

⁵² Charles Henderson, *Compensation or Insurance versus Employers' Liability: Address at the Sixteenth Annual Meeting of the Central Supply Association* (n.p.: 1910), 54-56.

Henderson does not seem to have commented on the actual discrimination that employers practiced in response to changes in the legal allocation of injury liability, but if he knew, he might have approved. In an unsigned editorial in 1914, the *Railway Age Gazette* explicitly commended employment discrimination under compensation laws, based on a perspective similar to Henderson's. The editorial, titled "Corporation Eugenics," wrote that General Electric's implementation of physical examinations "should operate to improve the efficiency of the employees by serving as an inducement to them to keep in good physical condition. There is nothing the average American is so prodigal of as his health. If he knows that his job depends on his keeping fit, there will be the strongest possible incentive for him to safeguard himself against disease."⁵³ General Electric was not motivated by eugenic concerns but rather market concerns, the editorial argued, and yet the changes in injury law meant that the company, by pursuing success in the market, had produced what the editorial considered to be positive eugenic outcomes: "The company is obviously inspired by a desire to reduce its liability under the compensation law; but the rule may prove a benefit to the men, as have the rules against drinking, enforced by the railroads. Perhaps in the end the corporations will do more for practical eugenics than the legislatures."⁵⁴ Henderson and the un-named editorialist expressed their discriminatory views at the beginning of compensation laws. Incentives toward discrimination against people with disabilities further intensified as compensation

⁵³ "Corporation Eugenics," *Railway Age Gazette*, vol. 57, no.8 (August 21, 1914): 334.

⁵⁴ "Corporation Eugenics," *Railway Age Gazette*.

laws spread and companies reacted to the further extension of injury liability that resulted from disabled employees' lawsuits.

Legal rulings in some disabled employees' lawsuits required disabled workers to run greater risks and incur greater costs than their able-bodied co-workers, as in the cases of John Garwin and Charles Weaver. These kinds of legal rulings forced already disabled workers to bear a greater share of the financial risks of total disability. Some states' early workmen's compensation laws individualized the risks specific to disabled workers, instead of transferring them to employers. The historian Roy Lubove has written that, prior to workmen's compensation, workers "had a choice between safety or employment."⁵⁵ At first, this was the choice faced by many disabled workers after workmen's compensation, if they could find employment at all. Over time courts increasingly created greater formal legal equality with regard to risk allocation for workers with disabilities, placing greater injury liability on the employers of people with disabilities, adding this greater risk into the package employers purchased when they bought the labor power of employees with disabilities. Many employers decided in response to stop hiring disabled people altogether; the labor power of many people with disabilities became a less salable commodity, limiting their access to waged income. As courts began to interpret compensation laws in ways that raised costs for employers, the laws began to treat employees with disabilities more equally in an important sense. And yet, this greater equality before the law helped spread a structure of increased incentives

⁵⁵ Roy Lubove, "Workmen's Compensation and the Prerogatives of Voluntarism," *Labor History* 8, (1967): 257.

for employers to practice discrimination against people with disabilities. In the words of Fred Wilcox of the Wisconsin Industrial Commission,

We allowed the employee who lost his second eye to have twice as much compensation for the loss of the second eye as for the loss of the first eye. But what about it? Did anyone ever get any compensation for the loss of a second eye? No; he never got a job. He never got a chance to lose his second eye in industry—to be blunt in stating the facts, employers would not hire him, because they would take on twice as much liability as they had before.⁵⁶

Transformations of liability encouraged employers to screen employees and applicants against a notion of average and acceptable risk. Disabled individuals' lawsuits helped turn people with disabilities into a population with above average and unacceptable risks for employers.

To exclude impaired people, employers had to first define what counted as an impairment and then to identify people whose bodies fell under that definition. Such impairments were not immediately visible to employers, as illustrated by Pullman management's uncertainty as to whether or not the company actually employed one-eyed people. Indeed, individual persons themselves might not know that their bodies counted as impaired. At the 1917 conference of the International Association of Industrial Accident Boards and Commission, Dudley Holman, the IAIABC's president, suggested

⁵⁶ Quoted in *Lawson v. Suwanee Fruit and Steamship Co.*, 336 U.S. 198 (1949). The original remark appears in United States Bureau of Labor Statistics, *Bulletin of the Bureau of Labor Statistics* 577 (1933), 157, 158.

that people with one sighted eye may not always know they had sight in only one eye. “How many of us know exactly what our vision is, and how many men do you suppose are working in industry today who have never had an accident to their eyes, so far as they know, and who are yet blind in one eye?” Holman asked conference attendees to imagine a worker who had “worked along during all his life under the assumption that he had two good eyes” only to find in an accident that the remaining eye was in fact not fully sighted. Identifying these kinds of impairments required medical expertise, and so chapter six returns to industrial physicians.⁵⁷

⁵⁷ “Proceedings of the Conference on Social Insurance Called by the International Association of Industrial Accident Boards and Commissions,” *Bulletin of the United States Bureau of Labor Statistics*, no.212 (Washington: Government Printing Office, 1917), 206.

Upton Sinclair, *The Jungle*, 1906.

*A steer that got loose at the slaughterhouse where Jurgis worked. As he leapt out of the way of the charging animal, Jurgis sprained his ankle. The sprain became progressively more painful, leading Jurgis to miss several weeks of work and lose his job. In the family's ensuing scramble to pay bills without Jurgis's income, all members of the household feared for their futures, bringing sleepless nights and angry days. Stress-related interpersonal conflict led another wage-earning member of the household to leave, further reducing the family's income. Several children in the family quit school to find waged work, leading to one of the children suffering frost-bite which permanently disabled several fingers on one hand.*⁵⁸

⁵⁸ Upton Sinclair, *The Jungle* (New York: Doubleday, Page & Company, 1906), 130-159.

Chapter Six. Actuarial Gatekeeping: The Remaking of Industrial Medicine

New liability for the financial costs of employees' injuries gave rise to corporate demand for methods to screen out potentially risky hires. This chapter turns to the supply side of this economy of employment discrimination. Employers set new strategic goals of reducing their exposure to the risks of employee injury. Industrial physicians served as the operational experts who carried out these new strategic goals, with their primary tactic being medical examinations.¹ Industrial physicians' commodification of people took on a new form defined by the logic of risk, as they carried out what this chapter calls actuarial gatekeeping, the use of medical examinations to avoid hiring physically impaired people.

Compensation laws changed the context businesses operated in; businesses responded by changing their strategies, as illustrated by events at Pullman. "I am very strongly of the opinion that we should take all steps to prevent physical crooks from getting on the employment list," wrote Pullman Company President David Crawford in 1934. He added, "there is just as good reason for not employing a man with a bad heart or

¹ I began to think of industrial medicine in terms of terms of strategy, operations, and tactics after conversation with my friend Greg Alt. The terms are military in origin but used in business as well. Strategy consists of fundamental and long-term goals. Operations means turning strategy into an immediately implementable plan, and tactics means the concrete activity involved in carrying out that plan. See Lee Roy Beach, *Leadership and the Art of Change: A Practical Guide to Organizational Transformation* (Thousand Oaks: Sage, 2006), 35, and Milan N. Vego, *Naval Strategy and Operations in Narrow Seas* (London: Frank Cass, 2003), 4.

bad arteries as there is for not taking on a new one-eyed man.” Crawford’s remark expressed a widely held opinion among management at many companies. These “physical crooks,” people with disabilities such as having only one hand or one eye, were people the company would have hired without remark prior to injury law reform. Crawford said “it is enlightened expenditure to see that we do not take in risks that are fundamentally poor at the start, especially when the times are such that we can afford to wait for men that are not physically below par before we hire them.” This expenditure was enlightened in the sense of spending money to save even more money. If the company was to profit by avoiding “employing a man with a bad heart or bad arteries,” the company had to identify such men.² This identification required medical expertise. Pullman had found another use for its medical department.

While some physical conditions that posed potential liabilities for companies might be identifiable on sight by a foreman, many people had conditions that were not immediately visible to laypeople and yet which could still lead to higher injury costs. Clarence Fors, for example, found his job at risk because of a condition not visible to the naked eye. In 1931, a representative of the Wisconsin River Paper and Pulp Company wrote to the Wisconsin Industrial Commission, including copies of letters from the company’s doctor who had diagnosed Fors with a liver and heart condition. The doctor concluded that due to Fors’s poor health the paper company ran

a certain risk in employing this man as it is quite possible that he might sustain a heart attack while working and injure himself, falling on the floor which in turn

² D. A. Crawford to L.S. Hungerford, May 31, 1934. Employee and Labor Relations, Medicine and Sanitation, Administrative Subject Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

could cause different internal injuries for which your company might be held responsible as long as he was apparently uninjured in your mill. You would have, undoubtedly, quite a time to prove that he had a heart attack and that the internal injuries sustained on account of the fall were only secondary.

Here again that the language of risk had entered the vocabulary of people standing at the intersection of employment and medicine.³

Fors had become the growing object of concern for the company because “[t]he danger of something happening to him has been increasing as his condition has been steadily getting worse.” Wisconsin River Paper said that Fors was “incapable of doing even the light work we have given him” and that company kept him on only because his father had worked for the company for more than 30 years. Noting that Fors had a wife and child he needed to support, and that his condition would not allow him to find a new job, the company said they were willing to keep him on provided that it could be released from liability for any injuries Fors might incur at work. The Wisconsin Industrial Commission replied, suggesting that Fors might elect to voluntarily waive his right to come under the workmen’s compensation law. Since the law forbade employers from soliciting non-election, the commission offered to write to Fors “and suggest that he make application to you [the employer] for work under a non-election on his part.” The commission requested that the company provide Fors’ mailing address for this purpose. Wisconsin River Paper supplied Fors’s address, the Industrial Commission wrote to Fors,

³ Wisconsin Industrial Commission Correspondence File E1747, Correspondence between Wisconsin River Paper and Pulp Company and Wisconsin Industrial Commission, Correspondence and forms, 1912-1954, Workmen’s Compensation Division records, Wisconsin Historical Society, Madison, WI.

and Fors agreed to waive his right to be covered by the workmen's compensation law.⁴ Clarence Fors kept his job by agreeing to accept all of the risk of work. Fors's situation illustrated a dynamic that Iowa Industrial Commissioner Garst had pointed out over a decade earlier: one downside of the compensation law was that "a crippled man has to reject its project or lose his protection."⁵

Crawford and Fors stood in opposite positions in terms of decision-making power and they stood at the end of a process of legal, business, and medical change. As businesses sought to avoid the financial risks posed by employee injuries, the immediate effect on industrial medicine was to help foster the expansion of the field by creating more demand for medical examinations. Once again law encouraged the spread of medical examinations. Physical screenings made employers aware of employees who were risky to hire, or rather, physical screenings were a key mechanism through which companies constructed the category of risky hire and consigned people to that category.

The Youngstown Sheet and Tube Company started pre-employment medical examinations in response to a February 26, 1913, "amendment to the Workmen's Compensation Act, known as Section 22" which "permitted employers with sufficient financial responsibility to carry their own liability insurance." The company expanded

⁴ Wisconsin Industrial Commission Correspondence File E1747, Correspondence between Wisconsin River Paper and Pulp Company and Wisconsin Industrial Commission, Correspondence and forms, 1912-1954, Workmen's Compensation Division records, Wisconsin Historical Society, Madison, WI.

⁵ "New Law Reducing Accidents," *Correctionville News*, October 15, 1914. In his talk at the meeting of the International Association of Accident Boards and Commissioners, Frank Pedley stated that in 1930 there were 12 US states that placed the burden of additional risks on disabled people in this way. United States Bureau of Labor Statistics, *Bulletin of the Bureau of Labor Statistics* 536 (1931), 250. People with disabilities had to elect not to fall under the protection of workmen's compensation if they wished to be employed, and in many states they did not have this limited choice.

medical examinations directly in response to self-insurance provisions. As their medical director would later put it, “it is hard for me to understand how any company can do business without pre-employment examinations. If you are large enough to have your own liability insurance which the state permits you to have under this Section 22 which was adopted in 1913, you have an opportunity to save on your compensation.”⁶ In his 1914 report, Iowa Industrial Commission Warren Garst quoted a letter from an Iowa manufacturer about physical examinations: “This company is having a physical examination made of every person now in its employ who is included in the Workmen’s Compensation Act, for the purpose of ascertaining their present physical condition.”⁷ He said that after workmen’s compensation laws, employers tended to “institut[e] a rigorous physical examination of [their] employes [sic].”⁸ “There is a growing tendency to subject the workmen to a physical examination” conducted by physicians working for employers, said Welker Given, secretary of the Iowa Industrial Commission, “[t]he result is that a good many men are thrown out of the benefits of the law.”⁹

⁶ P.H. Kennedy, “The Policy and Value of Pre-Employment and Periodic Check-Up Physical Examinations,” 31. In “Clinic on Health in Industry, under the Auspices of the Mahoning Valley Industrial Council with the Trumbull County Manufacturers’ Association, the Ohio Manufacturers’ Association, and the National Association of Manufacturers.” Youngstown Country Club, Youngstown, Ohio, October 2, 1940. National Association of Manufacturers records, Series 7, Industrial Relations Dept. Records, Hagley Museum and Library, Wilmington, DE.

⁷ Warren Garst, *First Biennial Report of the Iowa Industrial Commissioner to the Governor of the State of Iowa for the Period Ending June 30, 1914* (Des Moines: State of Iowa, 1914), 7. Rachel Marks details the spread of physical examinations to screen out disabled people as a response to workmen’s compensation. Rachel Marks, “Effects of Early Workmen’s Compensation Legislation on the Employment of the Handicapped, 1897-1915,” *The Social Service Review* 25, No. 1 (1951), 60-78.

⁸ *The Standard*, August 15, 1914, 175.

⁹ *Correctionville News*, July 1, 1915. On the history of medical examinations in workplaces, see Angela Nugent, “Fit for Work: The Introduction of Physical Examinations in Industry,” *Bulletin of the History of Medicine* vol. 57 (1983): 578-595.

In 1920 the National Industrial Conference Board surveyed companies about medical examination practices. The majority began physical examinations in or after 1914, a high point in workmen's compensation laws. The NICB sent questionnaires to 100 companies, 34 of which responded. Those 34 firms employed 410,106 people, for an average of over 12,000 employees per firm. The NICB data also helps give a sense of the volume of physical examinations. Of the respondents, 24 listed the number of persons examined in the previous year. "[I]n plants employing a total of 209,777 males, there were 178,367 physical examinations of applicants for employment and in plants employing 19,632 females, there were 29,074 examinations." This means these 24 companies examined over 8,000 applicants per year per company.¹⁰ The NICB found that "[i]n plants where records have been kept, an average of from three to five percent of all applicants examined have been refused employment because of physical defects."¹¹ The study found that "the average percentage of rejected applicants for employment in the 56 plants investigated by the National Industrial Conference Board was only 4.6."¹² "As a rule from 8 to 10 percent of applicants will be found to be under par and need careful placement, whereas about 2 to 5 percent have to be rejected."¹³ Of course, the numbers of people actually turned away from employment would have been even higher, as some

¹⁰ F. L. Rector, "Physical Examination of Industrial Workers: Results of an Investigation by the Conference Board of Physicians in Industry," *The Journal of the American Medical Association* vol. 75, no. 25, (December, 1920): 1739-1741.

¹¹ National Industrial Conference Board, *Health Service in Industry: Research Report Number 24, January, 1921* (New York: National Industrial Conference Board, 1921), 40.

¹² Rector, "Physical Examination of Industrial Workers," 1741.

¹³ "Preliminary Survey of Physical Examinations for Employees in Industry – 1927, compiled by the Library Division, October 1927, Henry L. Doherty & Co.," 7. National Industrial Conference Board records, Series 5, Wages to Workmen's Compensation, Hagley Museum and Library, Wilmington, DE.

people aware of medical examinations would begin to stop applying. Medical examinations in response to compensation laws were frequent and widespread in American businesses.

In 1914, the same year as the NICB study, the Ohio Industrial Commission made a study of physical examinations in order to ascertain the degree to which workers' employment prospects had changed due to Ohio's compensation law. The report included data on about forty companies employing a total of about 65,000 people. Of these, 29 companies reported that physical examinations were required for job applicants.¹⁴ The 26 of these companies that kept records examined 23,118 applicants and rejected 1,040 "owing to physical inefficiency," a rejection rate of about four percent.¹⁵ The report noted that the actual rejection rates would be higher but unrecorded because "physical examinations are usually only given to those who have prospects of securing employment. Applicants who are maimed, or in poor physical condition or undesirable for the work, are usually rejected by the employment officer without referring such applicants to the medical offices. In such cases, of course, no record appears in connection with physical examinations."¹⁶ In this new environment, physical condition and appearance had become a disqualification from employment.

¹⁴ *Bulletin of the Industrial Commission of Ohio* vol. 2, no. 1 (January, 1915), 8.

¹⁵ For a discussion of the history of the idea of efficiency see Jennifer Alexander, *The Mantra of Efficiency: From Waterwheel to Social Control* (Baltimore: Johns Hopkins University Press, 2008). The term 'physical inefficiency' as with the term 'unfit' conjures eugenic overtones to the 21st century mind. The term likely was intended that way. See chapter five.

¹⁶ Industrial Commission of Ohio, 12. Among "the principal defects" that the examinations screened for were "heart disease, hernia, venereal diseases, contagious diseases, flat foot, deformity, amputations or other evidence of serious injuries, pyorrhea, and chronic stomach and kidney disorders." Industrial Commission of Ohio, 12. See below for more on the reasons for rejections.

Chapter three charted the initial growth and use of medical examinations for risk management at Pullman. By the end of 1923 Pullman officials were putting their medical examinations to work on another risk management goal. They said that medical examinations were “for the mutual protection of the employer and the employee, especially in view of our liability under the Workmen’s Compensation Act.”¹⁷ Pullman officials, like other business personnel, saw compensation laws as a good reason to conduct physical examinations.

The threat of future legal changes further expanding injury liability shaped companies’ use of medical examinations. Employers worried about who was currently a risk to hire, but also about who might become a bad risk in the future. Any physical condition might become such a risk, even if it currently was not. For example, during internal discussions within Pullman about medical examinations, Pullman’s Safety Director Harry Guilbert raised concerns about employee syphilis as a potential cost to Pullman, after the company discovered at least three cases of employees who suffered workplace injuries that were complicated by syphilis in 1923. In general, Pullman officials tended to react to individual instances like this as evidence of a potentially large and previously undetected threat, and officials tended to err on the side of greater exclusivity in hiring in response, because they anticipated continuing expansion of injury liability. This in turn further expanded the appeal and use of medical examinations at Pullman. Guilbert’s concern arose because of a welder who claimed to be going blind due

¹⁷ Simmons to E.F. Carry, 12/12/1923, Employee and Labor Relations, F.L. Simmons Administrative Files, 1918-1936, Pullman Corporation Records, Newberry Library, Chicago.

to his work. He noted that “the Ohio [Industrial] commission has ruled that compensation for the loss of vision shall be based upon the actual physical impairment suffered by the claimant before correction and not after correction by the use of glasses.” A new ruling meant a new risk had been created. Guilbert added that the company had recently had a case where “a man lost the entire sight of one eye for which we will have to pay him, although judging by the glasses he was wearing at the time of the accident, he only had about 10% vision in the eye that was destroyed, but, of course, we had no record of this previous to the injury.”¹⁸ Had the company had medical records on this man, they could have argued that they were liable for less loss of sight.

Labor radical William D. Haywood referred to his organization, the Industrial Workers of the World as socialism with its working clothes on. He meant that socialists theorized about the present state of capitalism and the possibilities for a new society, while the IWW actually sought to act in the world to end capitalism.¹⁹ Industrial physicians were analogous; they were actuarial logic with its working clothes on. They organized and enacted the abstraction of working class people into acceptable and unacceptable – fit or unfit; good risk or poor risk, in the parlance of the day – based on the priorities of profit. As medical examination programs in business spread further after compensation laws, industrial physicians continued to discuss their field in economic

¹⁸ Guilbert to Crawford, 12/27/1923, Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968; Labor Relations 1942-1964; Medical Examinations, Truck Drivers, and Chauffeurs, 2956-1961, Pullman Corporation Records. See also Crowder to E.F. Carry, 11/14/1923 re: “Preemployment Physical Examination of Employees.”

¹⁹ Salvatore Salerno, *Red November, Black November: Culture and Community in the Industrial Workers of the World* (Albany: State University of New York Press, 1989), 38.

metaphors and to talk about workers as commodities. As industrial medicine became a discipline in corporate risk avoidance through hiring restriction, these metaphors took on a different cast. J.H. Redfern argued that “wages paid to industrial workers in the average plant over a period of four years equals the cost of the plant. We go on painting, repairing, inspecting the building, but our “human machine” is neglected. If we go into our development program without health service, we are gambling our money for we may be spending considerable time and money trying to develop men to the high degree of proficiency to which we have aimed and suddenly find out that the individual has to leave us” for health reasons.²⁰ Health reasons were largely defined by financial priorities in response to legal change, rather than by workers’ own well-being. Similarly C.H. Watson, an industrial physician at the American Telephone and Telegraph Company wrote, “[o]ne does not have his automobile examined but once.”²¹ As industrial medicine became a gatekeeping mechanism, and the body that industrial physicians cared for became in large part a fiscal one - the corporate body - these examinations took as a primary concern the population that made up companies’ labor force, and the orientation toward individual physical bodies was measuring them according to standards of risk in order to determine whether or not they could gain entry.

As Frank Purnell, President of the Youngstown Sheet and Tube Company put it, medical examinations were an important investment:

you go ahead and spend a million or a hundred thousand or two million dollars on a piece of equipment and you turn it over to three or four men to operate. You

²⁰ Quoted in “Preliminary Survey of Physical Examinations for Employees in Industry,” 5.

²¹ Quoted in “Preliminary Survey of Physical Examinations for Employees in Industry,” 19.

want to see that most men are in position to get the productive value out of that investment. You grease and oil and other things to see that the equipment is in working order and it is only fair to see that the men that operate the machine are in equal capacity.

Like machinery, employees were worth investing in, Purnell suggested.²² An official at the Joseph & Feiss Company put it this way: “[r]ecognition that the human element is, after all, the big factor in manufacturing” meant “an investment” in the company’s workers, “a cost of running its business, more important than the cost of maintaining its equipment (...) cost of production depends more upon the ability or inability of the work than upon any other single factor.”²³

Industrial physician C.H. Watson used this understanding to call for the extension of examinations beyond applicants, saying that “[t]he plant engineer, after passing upon the integrity of newly acquired equipment, periodically carries out an inspection to determine its efficiency, its rate of depreciation, and its relationship to the other portions of the plant with which it must coordinate its functions. The same logic applies to the human plant equipment. Hence the physical examination of the employee in all its phases.” In both applicant and employee examinations, the industrial physician’s eye was to be on screening out individuals: “No person who constitutes either a menace to himself, a menace to others, or a menace to property, should be considered acceptable for employment. In plant terms, such an individual is a hazard just as is an unbalanced

²² “Clinic on Health in Industry,” 4.

²³ “Clinic on Health in Industry,” 1.

flywheel with a defective governor.”²⁴ These metaphors figured workers as commodities that mattered to the degree that they were functional to businesses, and figured them as objects to be worked upon by experts. Implicit in this vocabulary was the idea of discarding (or not purchasing at all) the people not considered worth working upon. As William O’Neill Sherman, Chief Surgeon at the Carnegie-Illinois Steel Corporation, said:

[g]enerally speaking, industry commands the services of the best legal talent, engineers, chemists, accountants, metallurgists and other trained personnel. However, it has been somewhat reluctant to utilize the best [that] modern organized medicine has to offer. In the last analysis, the human element is the most important asset of industry. “Human engineering” can best be rendered by doctors who have an understanding of the problems confronting the employer, employee and public. They should be consulted more frequently and considered as a part of the plant organization.²⁵

Physicians like Watson and Sherman argued in effect that industrial physicians were very effective for companies given their priorities and outlook of treating people as commodities. After compensation laws, however, the purposes of industrial medicine transformed. Employers’ responded to compensation laws by rethinking their hiring strategies toward risk avoidance. Industrial physicians served an operational and a tactical role subordinated to these new strategies. Their new role was to carry out actuarial gatekeeping.

The phrase ‘actuarial gatekeeping’ bears some explanation. The meaning of gatekeeping is no doubt obvious: companies used medical examinations to keep some people off their employment lists. The point of referring to medical examination

²⁴ C.H. Watson, “Physical Examinations, A Resume,” in National Industrial Conference Board, *The Physician In Industry: A Symposium* (New York: National Industrial Conference Board, 1922), 22-26; 22-23.

²⁵ “Clinic on Health in Industry,” 26-27.

specifically as *actuarial* gatekeeping is to indicate the reasoning behind these medical examinations.²⁶ Employers used medical examinations for purposes that many people on the receiving end of the examinations saw as discriminatory. Calling this activity actuarial highlights that employers' discrimination was largely financial in character, and that it was tied to the control of risk. Medical examinations were measures taken by employers to shed or avoid risk for financial benefit.²⁷

Employers' use of workplace medical examinations for actuarial gatekeeping was not the first or the only instances of medical examinations as a form of gatekeeping. In the words of sociologist Paul Starr, over the course of the 19th and early 20th centuries there was an expansion of the "role of physicians as gatekeepers to positions and benefits in society" as doctors gained increasing authority to "set standards of human physiology, evaluate deviations, and classify individuals."²⁸ Both the U.S. government and insurance companies had long used medical examinations for gatekeeping purposes. Since at least the 1890s the U.S. government had used medical inspections of immigrants as part of

²⁶ The term is also meant to indicate a connection to statistical rationality as well as a connection to ideas and practices which arose within the insurance industry. See Daniel Bouk, "The Science of Difference: Developing Tools for Discrimination in the American Life Insurance Industry, 1830-1930." PhD diss., Princeton University, 2009; Caley Horan, "Actuarial Age: Insurance and the Emergence of Neoliberalism in the Postwar United States," PhD diss., University of Minnesota, 2011; Jonathan Levy, *Freaks of Fortune: The Emerging World of Capitalism and Risk in America* (Cambridge: Harvard University Press, 2012); and Sharon Murphy, *Investing in Life: Insurance in Antebellum America* (Baltimore: Johns Hopkins, 2010). On the cultural importance of this kind of reasoning in the United States, see also Jamie Pietruska, "U.S. Weather Bureau Chief Willis Moore and the Reimagination of Uncertainty in Long-Range Forecasting," *Environment and History*, vol. 17, no. 1 (February, 2011): 79-105; John Fabian Witt, *The Accidental Republic: Crippled Workmen, Destitute Widows, and the Remaking of American Law* (Cambridge: Harvard University Press, 2004), 140-143, 152.

²⁷ See Nicholas Barr, *Economics of the Welfare State* (Stanford: Stanford University Press, 1993), 97-101.

²⁸ Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry* (New York: Basic Books, 1982), 137.

controlling entry to the United States.²⁹ Life insurance companies had used medical examinations for specifically actuarial purposes for much longer, in order to profit by controlling who gained entry to the benefits of insurance. As insurance historian Dan Bouk has written, “[b]y the second half of the nineteenth century, medical directors had become essential to the life insurance apparatus.”³⁰ Insurance companies screened policy applicants to avoid so-called risky lives, in order to have a balance of premiums and payouts that kept insurance funds solvent and profitable.

As gatekeeping became increasingly prominent as the purpose for medical examinations, industrial physicians began to change how they justified their field. Medical examinations became even more important in assessments of the field, and the purposes met by medical examinations came increasingly to be described as financial benefits resulting from keeping out risky individuals. Physician C.E. Ford argued that compensation laws had made medical programs in industry more valuable. “The value of medical service in industry was emphasized when state compensation laws, which rendered it compulsory to provide medical and surgical treatment for injured workers, became effective.”³¹ Dr. Frank Rector argued that medical examinations were especially valuable as a result of compensation laws, because examinations helped employers select among employees based on assessments of potential risk. “No method yet devised for

²⁹ See Alan Kraut, *Silent Travelers: Germs, Genes, and the Immigrant Menace* (New York: Basic Books, 1994); Amy Fairchild, *Science at the Borders: Immigrant Medical Inspection and the Shaping of the Modern Industrial Labor Force* (Baltimore and London: Johns Hopkins University Press, 2003); Douglas Baynton, "Disability and the Justification of Inequality in American History," in Longmore and Umansky, *New Disability History* 33-57.

³⁰ Bouk, “The Science of Difference, 199.”

³¹ C.E. Ford, “The Physician in Industry and his Relation to Community Problems,” in National Industrial Conference Board, *The Physician In Industry: A Symposium*, 9.

estimating the compensation risk of a worker has surpassed the physical examination of applicants for employment, and the periodic re-examination of the employed force. (...) The careful physical examination of all workers and applicants for employment (...) will do more than any other one thing to reduce the hazards of occupation and the amount of money spent in compensation.”³² Once again the vocabulary of risk had become prevalent in institutional responses to injury, and again the justification of industrial medicine was in corporate profits. The difference was that the source of the profits now would be described as arising from liability minimization. Industrial physicians, like life insurance physicians, would help their employers create optimal risk pools, with member employees selected in order to reduce companies’ liabilities.

“[I]t behooves industrial physicians to show in some concrete form what benefits [employers] may expect,” wrote Harry Mock in his 1919 book on industrial medicine.³³ Mock named financial savings as a particularly important benefit of corporate use of industrial medicine, and “[o]ne of the greatest sources of saving to the employer is the physical selection of employees for work.”³⁴ Specifically, this meant selection through the use of medical examinations administered by industrial physicians. Medical examinations were for Mock one of the most important features of industrial medicine. Arguments for industrial medicine like Mock’s were about cost-savings, and the savings would arise as a result of companies choosing not to hire certain people. This was

³² Frank L. Rector, “Relation of the Physician in Industry to Workmen’s Compensation Laws,” in National Industrial Conference Board, *The Physician In Industry*, 60.

³³ Harry E. Mock, *Industrial Medicine and Surgery* (Philadelphia: W.B. Saunders and Company, 1919), 80.

³⁴ Mock, *Industrial Medicine and Surgery*, 86.

different from some of the economic arguments for industrial medicine prior to workmen's compensation, about how a healthy workforce would be more productive. Mock was in effect arguing that industrial physicians could help companies profit by practicing actuarial gatekeeping.³⁵

P.H. Kennedy, an industrial physician at the Youngstown Sheet and Tube similarly said that "physical examinations have a very definite role in the establishment of lower manufacturing costs."³⁶ Pullman's Thomas Crowder wrote that "[p]re-employment examinations are useful and have an economic value."³⁷ Crowder's comment makes sense in light of Pullman's balance sheet. In 1934 Pullman spent \$24,538 on workplace injury related expenses, approximately 3% of the total \$851,498 that Pullman paid in wages in 1934. Accidental injury costs were equivalent to a 3% payroll tax, providing Pullman with incentives to reduce these costs.³⁸ Medical

³⁵ Paul Bellamy describes financiers involved in the corporate re-organization of industry as helping bring what he calls "actuarial self-awareness" into manufacturing. Paul Bellamy, "From court room to board room: Immigration, juries, corporations and the creation of an American proletariat: A history of workmen's compensation, 1898-1915," (PhD diss., Case Western Reserve University, 1994), xiii. This is an important point. At the same time, while for Bellamy this spreading actuarial consciousness moved from financial firms to manufacturers, law was also a source of actuarial consciousness. Law changed employers' operations, employers reacted to legal change, and that consciousness was passed downward to industrial physicians. By the same token, industrial physicians fleshed out the detailed operational workings of this new manifestation of actuarial consciousness in employment relationships. Employers gave the orders; doctors wrote the plans.

³⁶ "Clinic on Health in Industry," 18.

³⁷ Memo from T.S. Crowder to L.S. Hungerford. Undated. Administrative Subject Files, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Newberry Library, Chicago, Ill. \$24,538.02 in 1934 dollars is equivalent to \$396,142.53 in 2009 dollars according to the US Bureau of Labor Statistics inflation calculator (<http://data.bls.gov/cgi-bin/cpicalc.pl>, accessed 12/22/09).

³⁸ Pullman Corporation, "Employer's Application for Permission to Carry His Own Risk Without Insurance," 1934. Pullman Corporation, "The Pullman Company, Balance Sheet, As Of December 31, 1934" Undated. Law Department, General Adjusters, Workmen's Compensation records, 1912-1980, Pullman Corporation Records, Newberry Library, Chicago, Ill. Pullman's 1934 cost for accidental injuries, \$24,538.02, is equivalent to \$396,142.53 in 2009 dollars. US Bureau of Labor Statistics, Inflation Calculator. Online, Internet, <http://data.bls.gov/cgi-bin/cpicalc.pl> (accessed 12/22/09).

examinations might reduce these costs, with the savings gained outweighing the additional expense of the examinations. Industrial physician Irving Clark, of the Norton Company, estimated that physical examinations cost \$0.63 per employee at General Electric and about \$1 per employee at Norton.³⁹ The National Industrial Conference Board Estimated that costs per examination in the steel industry ran about thirty cents per examination. The NICB also estimated these costs at about \$3.60 for every \$1000 in payroll costs, or 0.36% of payroll costs.⁴⁰

As the purposes of industrial medicine became increasingly defined by risk avoidance, the actual practices of medical examination changed in order to meet this goal, both operationally and tactically, as demonstrated by industrial medicine at Pullman. In his capacity as medical director at Pullman, Thomas Crowder helped construct and administer a program of physical examinations. This project, through Crowder's involvement in the American Association of Industrial Physicians and Surgeons, both informed and was informed by the conversation within the broader industrial medicine about medical examinations. Crowder corresponded with the physicians who conducted the physical examinations of employees for Pullman. Initially he simply asked why doctors marked certain candidates for rejection.⁴¹ The examining physicians cited various reasons for rejecting applicants. A doctor employed by Pullman

³⁹ W. Irving Clark, *Health Service in Industry* (New York: MacMillan, 1922), 97.

⁴⁰ National Industrial Conference Board, *Medical Care of Industrial Workers* (New York: National Industrial Conference Board, 1926), 76, 184.

⁴¹ T. R. Crowder, "Instruction for Examination of Yard Help," Undated. Employee and Labor Relations, Medicine and Sanitation, Administrative Subject Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

in St. Louis said that he rejected applicants “for epilepsy if we can find out the individual is subject to it. They are also turned down if they are missing fingers or parts of fingers. They are also rejected for marked deformities of the arms or legs.”⁴² A Pullman doctor from Atlanta said that “hypertension, heart disease, hernia, and defective vision are disqualifying defects for all types of applicants.”⁴³ Another Pullman doctor wrote that “[w]e have no very definite list of defects for which we reject. We try to pass judgement [sic] on a man’s ability to do the work for which he is being employed,” adding that “accepting and rejecting men in this work is largely a matter of personal opinion, and we probably reject some men who might be safely employed. I am sure we at times accept men for employment whom we afterwards wish we had rejected.”⁴⁴

The initial variation at Pullman fit with what the Ohio Industrial Commission found in its 1915 study of physical examinations. The report concluded that in general physical examinations “were not conducted along exact lines of scientific investigation, but instead, each type of examination was arranged to point out the defects it seemed important to disclose in relation to the particular requirements of the establishment or the ideas of those in charge.”⁴⁵ Over time, however, examinations would become more systematic, though still subordinated to “the ideas of those in charge” in business.

Crowder began systematizing rejects at Pullman, by requiring that all facilities send

⁴² W. H. Spoirman to Thomas Crowder, June 20, 1934, Employee and Labor Relations, Medicine and Sanitation, Administrative Subject Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴³ Dr. Daniel Elkin to Crowder, June 19, 1934. Employee and Labor Relations, Medicine and Sanitation, Administrative Subject Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴⁴ Dr. R.J. De Motte to Thomas Crowder, June 26, 1934. Employee and Labor Relations, Medicine and Sanitation, Administrative Subject Files, Pullman Corporation Records, Newberry Library, Chicago, Ill.

⁴⁵ *Bulletin of the Industrial Commission of Ohio* vol. 2, no. 1 (January, 1915), 8.

reports each month including the number of applicants examined, passed, and rejected and by formulated standard policies on which applicants to reject.

The standards Crowder propagated do not seem to have limited the causes for rejection anywhere in the company. Rather, if doctors at one facility rejected people for some cause, Crowder made that into a cause for rejection at all facilities. An internal document, “Instructions for Examination of Yard Help” included under causes for rejection “blindness in one eye” – the job required 20/40 in one eye and 20/60 in the other at worst, “marked defective hearing”, heart disease, suspicion of tuberculosis, hernia, “major crippling deformities,” and pregnancy, among other causes.⁴⁶ Pullman cast a broad net in terms of viewing people as medically unfit to hire. Anyone who would suffer a more expensive injury in the event of an accident was likely to be considered a poor hiring decision.

By the late 1920s, Pullman was regularly turning away applicants in large numbers. Thomas Crowder wrote to another Pullman official noting that due to the results of physical examinations, “[r]ejections at [Pullman’s manufacturing facility in] St. Louis were 21.5% last year, 17.7% in 1928, and 15.5% in 1927. (...) In Chicago last year 10% of yard applicants were rejected on the medical findings.”⁴⁷ Pullman officials did not comment on the changing rate of rejections. Perhaps people with disabilities applied more often for work at Pullman. Perhaps Pullman officials preferred higher rates of

⁴⁶ Untitled undated document in the files of Thomas Crowder. Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968; Pullman Corporation Records. The item’s placement in Crowder’s file suggests it was probably from 1930 or 1931.

⁴⁷ Thomas Crowder, May 27, 1930. Administrative Subject Files, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Newberry Library, Chicago, Ill.

rejection, as a way to assure greater ‘fitness’ among employees. These figures were higher but basically in keeping with what Crowder saw happening around the country. As he put it, “some of the leading industrial physicians in the country [have] informed me that rejections [at their companies] average from one to fifteen percent.”⁴⁸

By 1930, Pullman had a program of physical examinations in almost all of the company’s facilities. Policy changes at Pullman were informed by discussions among industrial physicians as specialists networked across firms all of whom drew on their experiences at their companies. Crowder and his colleagues extrapolated from experience in response to unclear or fuzzy probabilities – how likely would someone be to get hurt? Which people would be more hurt than usual by injury? Which injuries were the injuries to be compensable, given past practice? In doing so, Crowder and company sought to get ahead of the changing legal curve with regard to liability.

In particular, physicians discussed the reasons for rejections, and how to systematize these rejections. C.E. Ford of the New York based General Chemical Company listed rejection reasons including

“Organic disease — including uncompensated heart disease, disease of the circulatory system, stomach, liver, kidneys, etc. Loss of or defective vision. Deafness or disease of the ears likely to lead thereto. Disease of the nervous system. Hernia, unless operated upon or unless the company is released from legal responsibility. Communicable disease. Amputations. Defective mentality.”⁴⁹

⁴⁸ Thomas Crowder, May 27, 1930. Administrative Subject Files, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records.

⁴⁹ C.E. Ford, “The Physician in Industry and his Relation to Community Problems,” in National Industrial Conference Board, *The Physician In Industry: A Symposium*, 10.

Similarly, the Youngstown Sheet & Tube Company did not hire people with poor vision, high blood pressure, heart disease, “syphilitic disease of heart, blood vessels, and nervous system,” hernia, bone disease, impaired joint function due to disease, being overweight or underweight, “marked curvature of the spine” or any other “conditions that would detract noticeable [sic] from applicant’s ability or efficiency, or would be a source of danger to himself or fellow employees.”⁵⁰

The more that businesses used industrial medicine to identify people not to hire, the more this practice became systematized. Some doctors specified lists of particular conditions that were unacceptable in employees. Soon, however, industrial physicians began to create categories that rated applicants on a scale. In order to sort people into categories, the company had to have examination procedures so that doctors knew what to look for.⁵¹ To put it another way, sorting applicants and employees’ bodies into categories based on degrees of acceptability required epistemological construction as well as construction of knowledge generating techniques. The knowledge produced by physical examinations was not only descriptive but constitutive. That is, while companies made decisions about who to exclude because of pre-existing corporeal conditions (such as having one eye or one hand, or epilepsy), decisions about what to look for and who to exclude helped create the categories that made people unacceptable to hire.⁵² Industrial

⁵⁰ “Clinic on Health in Industry,” 18.

⁵¹ Physicians actively created a new state of affairs, changing the social world they sought to know by virtue of their knowledge. For a philosophical reflection on this condition with regard to knowledge about society, see Ian Hacking, *Historical Ontology* (Cambridge: Harvard University Press, 2002).

⁵² As political scientist Hugh Hecló has put it, “[g]overnments not only “power” (...) they also puzzle. Policy-making is a form of collective puzzlement” about how to turn priorities “into concrete collective action.” Hugh Hecló, *Modern Social Politics in Britain and Sweden: From Relief to Income*

physician C.E. Ford said that medical examinations should sort applicants into one of four categories.

1. Individuals physically and mentally fit for any job.
2. Individuals physically fit for any employment but below par in development or by reason of minor defect, who by treatment may be placed in Class 1.
3. Individuals fit for limited employment when certified to by plant physician.
4. Individuals unfit for any employment.⁵³

R.S. Quinby, another industrial physician, proposed a similar four group classification system, listing employees as “fit for any work in the plant,” “fit for any job but having slight physical defects,” “fit only for certain work when specifically approved by physician,” and “unfit for work in the plant.”⁵⁴

Pullman began using an A through E scale. Examining physicians were to record “all physical defects and diseases found” and group applicants as follows:

- A – Men of good physique without defects or diseases.
- B – Men with defects or diseases of slight importance, not handicapped for work. (Such as carious teeth, large tonsils, small varicocele, moderately defective vision, etc.)

Maintenance (New Haven: Yale University Press, 1974), 305. I became aware of Hecló’s work via Margot Canaday’s *The Straight State: Sexuality and Citizenship in Twentieth-Century America* (Princeton: Princeton University Press, 2009), 3. The point extends beyond state power and into probably all forms of governing others. Governing people requires a variety of knowledge and thought with which to govern, and so requires processes through which collective thought and knowledge generation take place. Power has an intellectual life. For other works on the intellectual life of governance, specifically Canaday, *The Straight State*; Horan, “Actuarial Age”; Christopher Tomlins, *Law, Labor, and Ideology in the Early American Republic* (Cambridge: Cambridge University Press, 1993); Barbara Young Welke, *Law and the Borders of Belonging in the long Nineteenth Century United States* (Cambridge and New York: Cambridge University Press, 2010).

⁵³ C.E. Ford, “The Physician in Industry and his Relation to Community Problems,” in National Industrial Conference Board, *The Physician In Industry: A Symposium*, 10.

⁵⁴ Quoted in “Preliminary Survey of Physical Examinations for Employees in Industry,” 7.

C – Men with defects or diseases constituting slight handicaps, or temporary handicaps amenable to corrections. (Such as symptomless heart diseases, large varicocele, hernia, bad pyorrhea, acute diseases, etc.)

D – Men with defects or diseases constituting serious or permanent handicaps, but able to work. (Such as heart disease, nephritis, chronic infections, very bad hernias, etc.)

E – Men with defects or diseases constituting serious or permanent handicaps which make them unfit for work.⁵⁵

Crowder recorded that in 1926 Pullman examined 10,806 people, about 25% of them applicants and the rest of them employees. The table below lists how the company classified these examinees in its categories.

Table 8. Examinee Classifications at Pullman, 1926

Classification	Number of people	Percent of total
A	2601	24.1
B	4810	44.5
C	2878	26.6
D	487	4.5
E	30	.3

Only people in category A were considered impairment free. Thus over 75% of examinees were considered to have some physical impairment. For these 10,806 examinees, physicians found 16,135 “defects,” an average of about 1.5 per person.⁵⁶ This fit with Crowder’s observations in another company memo that “thorough and competent examinations (...) show physical defects in a large proportion of men.”⁵⁷

In addition to surveys at Pullman, Crowder’s files contained the results of a medical survey of employees conducted by the Metropolitan Life Insurance Company in

⁵⁵ Crowder to all medical examiners, May 29, 1923, in Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records.

⁵⁶ Crowder to Sterling B. Taylor, March 25, 1926, in Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records.

⁵⁷ Crowder to Keeley, September 14, 1922, in Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records.

1921. MetLife examined 7,530 employees, and found that “1,880 or 25 per cent (...) had one or more impairments of greater or less significance.” As such, in tightening up hiring restrictions due to impairments, companies potentially excluded large numbers of people.⁵⁸ Crowder noted that “it is often difficult to decide whether the defects are of significance, either as regards competence or hazard.”⁵⁹ Pullman tended to err on the side of considering applicants’ physical condition to be significant, and rejecting applicants accordingly. For applicants,

[o]rdinarily only Class A and Class B men should be approved for employment; but Class C men may be accepted if their defects are of little consequence or after they have had proper treatment. Do not accept [these three words are underlined] one-eyed men, men with badly defective eyes and ears, with organic heart disease, with suspected tuberculosis, with nephritis, with mental infirmities, with major deformities, or men who are much undernourished and manifestly below par physically.⁶⁰

This meant that over 30% of examinees, people in categories C, D, and E, should have their employment restricted at best, with many, those in categories D and E, being unemployable at Pullman.

Crowder also noted that conducting these examinations had required major expansions in medical personnel. The company employed 61 medical examiners in 1926. Industrial medicine was a growth industry at Pullman. Accident sufferers and applicants each made up just over one quarter of the people that Pullman doctors examined, and that company doctors saw more job applicants than employees. Of the 2791 applicants

⁵⁸ “Results of the 1921 Annual Physical Examination of the Home Office Employees of the Metropolitan Life Insurance Company,” in Employee and Labor Relations Medicine and Sanitation, Administrative Subject Files, 1905-1968, Pullman Corporation Records.

⁵⁹ Crowder to Keeley, September 14, 1922.

⁶⁰ Crowder to all medical examiners, May 29, 1923.

examined in 1926, the company accepted 2506 and rejected 285, a ten percent rejection rate for the year.⁶¹

Companies examined large numbers of applicants and employees, with some variations in their selection criteria. Industrial physicians and companies discussed these criteria and changed them over time. Medical examinations also required companies to develop their information management and knowledge production techniques: medical examinations needed to be standardized, and needed to produce data which could be passed upward within the corporate chain of command. For example, at Pullman Thomas Crowder had to correspond with Pullman physicians about their examination practices, calculate statistical data based on the results of this correspondence, and formulate and communicate new policies in response to the results of this data. For someone in Crowder's position, industrial medicine had become removed from both individuals' bodies and from provisioning for individuals' health. Over time, the individual examiners came to operate at an increasing distance from the goal of employee health as well.

As company officials made reducing their exposure to the risks of employee injury liability into a strategic priority, medical directors developed new plans for the operational life of industrial medicine. This in turn remade medical examinations as a tactic; the techniques of medical examination changed as examinations came to center on actuarial gatekeeping. P.H. Kennedy, an industrial physician at the Youngstown Sheet and Tube said that medical examinations could "be conducted with mass production

⁶¹ Crowder to Sterling B. Taylor, March 25, 1926.

methods and at very little cost.”⁶² These “mass production methods” included two basic elements: making the examinations faster, and standardizing the process. These elements played an important role in reducing the degree to which examinations played any medical or health-improving role for the individuals examined. Many people in leading roles in industrial medicine agreed with Kennedy. Helena Williams wrote that

There is a distinction between the physical examination which is conducted in many industries as a basis for the selection of labor and the periodic physical examination which is made as a basis for health promotion. (...) the examination which is used for the selection of labor is a relatively simple examination. The examination which is required as a basis of advice and counsel to an individual generally has to be very painstaking examination [sic], and involves not only the physical examination itself but a considerable amount of time in discussing the case with the individual.⁶³

That is to say, medical examination as a form of care directed toward the examinee differed from medical examination as a form of gatekeeping directed toward the composition of employer risk pools. Industrial physician C.H. Watson said that “[t]he maximum length of time for the physical examination of one applicant should not be more than fifteen minutes and in many cases not over six to eight.”⁶⁴ Other doctors argued for even faster examinations. “It is the experience of industry that from 5 to 15 minutes is usually occupied in each examination. This, of course, is insufficient to give a thorough examination but for a pre-employment examination this would be satisfactory.”⁶⁵ As the National Industrial Conference Board put it,

⁶² “Clinic on Health in Industry,” 18.

⁶³ Quoted in “Preliminary Survey of Physical Examinations for Employees in Industry,” 1.

⁶⁴ National Industrial Conference Board, *The Physician In Industry: A Symposium*, 34.

⁶⁵ National Industrial Conference Board, *Medical Care of Industrial Workers*, 30.

[s]peed is often essential in industrial examinations in order to avoid delay in the employment department and undue waiting in the medical department. (...) The usual physical examination in industry is neither exhaustive nor conclusive. (...) the consensus of opinion seems to favor the limiting of the physical examination to determine the workers fitness for employment in a particular type of work and to discovering defects which are likely to impair his general usefulness.⁶⁶

This examination took between 5-10 minutes.⁶⁷ Industrial physician Irving Clark declared that “[t]he usual time allotted to the physical examination is on the average five to six minutes.”⁶⁸ The New England Conference of Industrial Physicians said that “[o]rdinarily such an examination can be made in 5 minutes.”⁶⁹ Youngstown Sheet and Tube’s Dr. Kennedy described an examination procedure that was faster still. “Such an examination does not require more than three minutes time if the doctor has a clerk present to take his dictation as he proceeds with the examination.”⁷⁰ Given that clerks’ hourly pay was likely cheaper than that of physicians, this additional investment in staff time could result in a savings by reducing the physicians’ time per examination. Kennedy detailed the methods involved in this three minute examination “conducted with mass production methods,” as follows:

the applicants enter booths arranged on one side of the waiting room where they remove every item of clothing. In the nude [they leave] the opposite side of the booth one at a time to enter the examination room (...) arranged so that the doctor has an opportunity to see them enter and leave the room. In this way the examiner’s eye can at a glance detect the essential abnormalities of the arms, legs, back, and inguinal regions. The applicant steps on a scale to be weighed and measured, and then must

⁶⁶ National Industrial Conference Board, *Medical Care of Industrial Worker*, 27.

⁶⁷ National Industrial Conference Board, *Medical Care of Industrial Workers*, 22.

⁶⁸ Clark, *Health Service in Industry*, 74

⁶⁹ Quoted in “Preliminary Survey of Physical Examinations for Employees in Industry,” 20.

⁷⁰ “Clinic on Health in Industry,” 18.

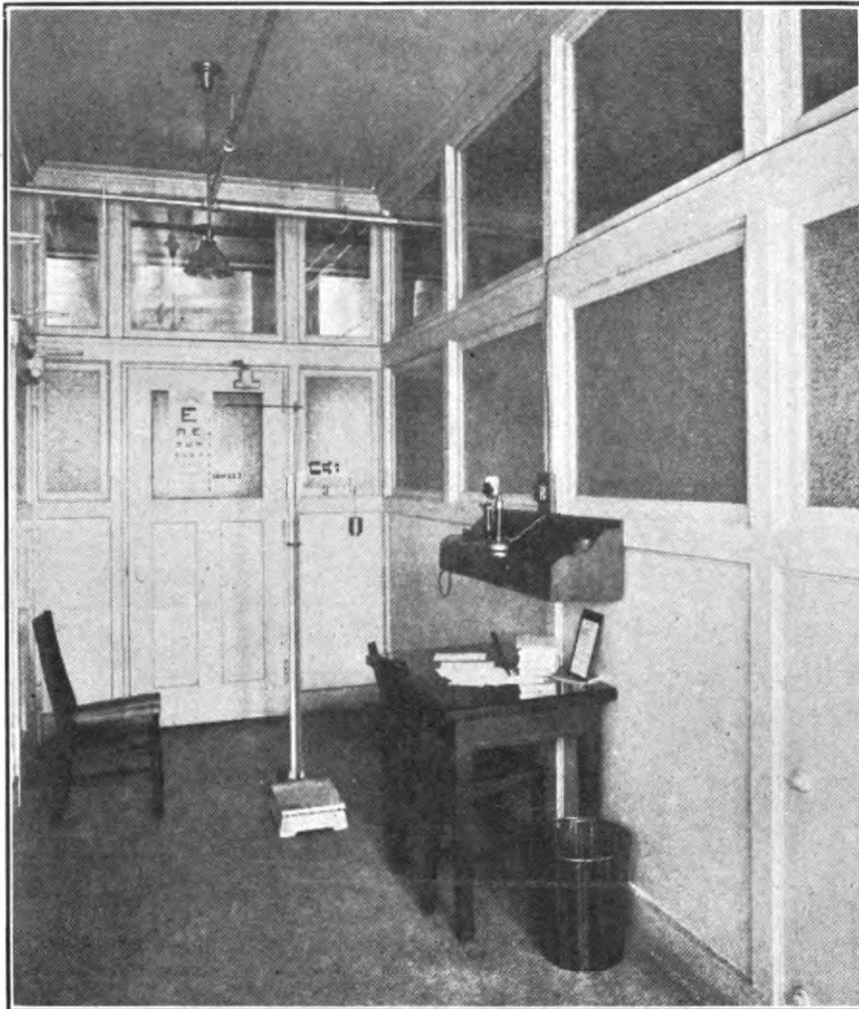
make a half-turn while standing on the scales before his blood pressure is taken and a stethoscopic examination of the heart made.⁷¹

Kennedy noted that the examinations did not involve taking any medical history, admitting that they did not have any medical value for the individuals examined. For Kennedy there was no real alternative because of the link between medical examination and employment. “When a man is getting a job and you start asking him all about his past medical history, you have as much chance of getting him to tell the truth as a complete stranger would if he asked you to sign a blank check.”⁷²

⁷¹ “Clinic on Health in Industry,” 18. This method made the most of physicians’ time by using a particular arrangement of space, a particular architecture, and investment in materials. In a sense, medical screening programs involved a version of the political economy of speed that Christopher Tomlins and others have identified as operating in machinery-intensive industry. Christopher Tomlins *Law, Labor, and Ideology in the Early American Republic*, 322-326; Alfred Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge: The Belknap Press of Harvard University Press, 1977), 281-283. This economy of speed, however, is not specifically defined technologically but politically and financially. The goal of spending money on the physical space of the examination site, like investments in machinery, was to allow the work to be conducted more quickly in order to ultimately save money by getting the most out of physicians’ labor. That goal was written into the materials, and those materials reinforced that goal.

⁷² “Clinic on Health in Industry,” 18.

Figure 12. Medical examination room at General Electric plant in Lynn, Massachusetts.⁷³



Some industrial physicians criticized the rising speed of medical examinations conducted using “mass production methods,” decriing that “too often” company doctors carried out “superficial inspection” with the only goal being “rejection of the evidently unfit.” This inspection “consists of a hasty survey for obvious defects and apparent

⁷³ C.D. Selby, *Studies of the Medical and Surgical Care of Industrial Workers* (Washington: Government Printing Office, 1919), 56.

sickness.”⁷⁴ Critics of the speed up of medical examinations hoped that the technique might be genuinely beneficial to the people examined as well as to the employer paying for the examination.

August Knight, medical director at the Metropolitan Insurance Company, praised the use of physical examinations in industry – provided examinations produced medically useful knowledge.

[T]he physical examination of itself is not helpful in the slightest if the doctor who makes it and the individual who takes it do nothing more. All depends on the able, interested physician who obtains and discusses the complete physical history of the willing, cooperative individual before and after the physical examination and who then gives all the appropriate advice to solve the individual’s problems. Others have called our attention to the enrichment of life that comes through added years of maintenance of health of men, women, and children; and particularly of the heads of families during the years of helpful, happy productivity that can well be added to their lives and to their health as the results of these examinations.⁷⁵

For Knight, implicitly at least, if examinations were to have any use for medical care then examinations could not be reduced to a gatekeeping measure.

Like many others, William Sawyer, industrial physician at Eastman Kodak, saw medical examinations as central to industrial medicine: “[i]ndustrial medical work should find its first and chief point of contact with the industry and the worker through the physical examination.” Sawyer recognized that industrial medicine “depend[ed] largely

⁷⁴ G.M. Kober, and E.R. Hayhurst, *Industrial Health* (Philadelphia: P. Blakiston's Son and Company, 1924), 129. The discussions of medical examinations surveyed here were not only descriptive of the range of practices in industrial medicine but were prescriptive as well. These works formed part of the process through industrial physicians decided how to practice industrial medicine, collectively as they built their field in its early days, and individually as new physicians came into the field.

⁷⁵ Augustus S. Knight, *The Value of Periodic Examinations of Life Insurance Policyholders* (New York: Metropolitan Life Insurance Company, n.d), 9. In *Employee and Labor Relations Medicine and Sanitation*, Administrative Subject Files, 1905-1968, Pullman Corporation Records

upon the extent to which the management is convinced of its value” but believed that medical examination of employees “arouses, or should arouse, [employees’] interest in health.”⁷⁶ In effect, Sawyer and Knight saw medical examinations as capable of providing medical care to employees as well as financial care to corporations’ risk management plans.

C.H. Watson, of the American Telephone and Telegraph Company, expressed a more pessimistic view than Sawyer and Knight. Watson wrote that “the physical examination of the applicant is entirely inadequate from the standpoint of proper medical health supervision.” Watson added that

particular effort should be made, in the formulation of a standard physical examination plan, to bring out the fact that we are searching for a few cardinal points on which to pass judgment as to employment of an individual. In other words, it should be very definitely understood by the medical man entering industry that he is not carrying out a hospital, a dispensary, or even a private office examination of a patient. (...) Once this method is in operation, it will be found that the average time consumed will not be prohibitive from the standpoint of costs. The maximum length of time for the physical examination of an applicant should not be more than fifteen minutes, and, in many instances, not over six or eight.⁷⁷

As Irving Clark put it, “[s]peed in examination is essential.” Achieving speed required “concentrat[ing] on the points of industrial rather than medical importance (...) what may be called industrial physical defects.”⁷⁸ Care for the worker’s or applicant’s body was secondary to determining if that body was a suitable or unsuitable factor of production.

⁷⁶ William Alfred Sawyer, “The Medical Department in Industry,” in National Industrial Conference Board, *The Physician In Industry: A Symposium*, 18.

⁷⁷ C.H. Watson, “Physical Examinations: A Resume,” in National Industrial Conference Board, *The Physician In Industry: A Symposium*, 22-23

⁷⁸ Clark, *Health Service in Industry*, 74.

Over time there was less and less possibility for combining care for the health of the examined and with care for the composition of employers' risk pools.

In addition to becoming faster, medical examinations became more standardized over time, as illustrated by the spread of medical forms. In his introduction to the National Industrial Conference Board 1922 symposium, "The Physician in Industry," industrial physician John Moorhead of the Conference Board of Physicians in Industry described standardization of medical examinations via forms as one of the principle tasks of industrial physicians' professional organizations.⁷⁹ Toward this end, several leaders in industrial medicine published works collecting medical forms developed at specific companies and proposing new ones. These collections of forms offered individual practitioners and their corporate employers a resource for standardizing the practices of medical examinations. They helped companies carry out the epistemological or categorical construction needed in order to run their medical programs.

Medical forms also helped firms govern the lowest level practitioners who actually conducted medical examinations. Forms were tools with which individual examining physicians did their work upon the bodies of applicants and employees. They were tools that both reflected and shaped the tools' wielders.⁸⁰ Forms helped managerial personnel to supervise medical examiners and to structure the medical examination around managerial priorities.

⁷⁹ National Industrial Conference Board, *The Physician In Industry: A Symposium*, 2.

⁸⁰ This point is a kind of miniaturized analogy to the criticism of the instrumentalist conception of law and the state. On this, see Christopher Tomlins, *Law, Labor, and Ideology in the Early American Republic*, 304, and Michael Heinrich, *Introduction to the Three Volumes of Karl Marx's Capital*, translated by Alexander Locascio (New York: Monthly Review Press, 2012), 199-218.

Pullman’s data on rejection rates and numbers of examinations and other companies are material for historical analysis. The process through which this material was produced can also be analyzed. Company data on rejection rates and medical examinations are the result of companies’ tabulations, tabulations that can themselves be studied historically as examples of how early 20th century institutional actors carried out the intellectual work required for business operations. The forms developed for use in industrial medicine helped companies collect information; that information is interesting, and so are ideas implied in that information collection. Medical forms themselves, even or perhaps especially when blank, are cultural objects that contain relevant content, in that they reflect a mental world or conceptual architecture.⁸¹

The form below from the Eastman Kodak Company helped industrial physicians and the heads of departments who hired workers to know if an applicant had actually arrived for a medical examination.

MEDICAL DEPARTMENT—EASTMAN KODAK COMPANY.

Rochester, N. Y.,.....

Eastman Kodak Company.

Gentlemen:.....has reported to me for physical examination.

Medical rating is.....

Yours truly,

.....M. D.

⁸¹ For treatments of paperwork as tools used in the work of abstraction and objects historians can analyze, see Caitlin Rosenthal, “From Memory to Mastery: Accounting for Control in America, 1750-1880,” *Enterprise & Society*, vol. 14, no.4 (December 2013): 732-748; Caitlin Rosenthal, “Storybook-keepers: Numbers and Narratives in Nineteenth-Century America,” *Common-Place* vol. 12, no.3 (April, 2012), Online, Internet, <http://www.common-place.org/vol-12/no-03/rosenthal/> accessed February 1, 2014; and Lisa Gitelman, *Paper Knowledge: Toward a Media History of Documents* (Durham: Duke University Press, 2014).

This short slip reduced the examination to the immediately relevant components for the purposes of hiring: had an examination occurred, and to what standardized medical rating had the physician assigned the examinee.⁸² For physicians conducting examinations, forms scripted and standardized the process. Forms like the one below circumscribed the judgment and authority of medical examiners by requiring a set list of items for which to look.

⁸² Selby, *Studies of the Medical and Surgical Care of Industrial Workers*, 94.

Figure 13. Examination form - men.⁸³

PHYSICAL EXAMINATION—MEN.

Name			Clock No.	Dept. No.	
Address			Married Single	Age	
Nationality	Occupation	Date employed	Date examined	Referred by	
What diseases have you had?					
Nature		Date	Duration	Complications	
What injuries, accidents, or surgical operations have you had?					
Nature		Date	Duration	Results	
Have you ever had:					
Hernia	Rheumatism	Fistula	Venereal disease		
Signed					
Height	Weight	Temperature	Inspection and palpation of head and neck		
Tongue	Teeth	Gums	Throat	Nasal passages	
Right Vision:					
Left	Color blind	Wear glasses	Right Hearing:		Left
Auscultation Lungs:			Percussion		
Sounds Heart:	Rhythm	Size	Blood pressure:	Systolic	Diastolic
Pulse:		Condition of arteries	Inguinal or femoral hernia		
Condition of abdominal viscera:					
Urinalysis:	Spec. gravity	Albumen	Sugar	Sediment	Microscopic
Pupils	Tremors	Stellwag Groef's Romberg	Spine	Glands	Reflexes
Scars or deformities from operation, injury, or disease.....					
Evidence of infectious disease.....					
Accepted		Physically unfit		Rejected	
Why?					
(Signed)..... Examining physician.					

The form codified physicians' authority within their domain, certified it by a mixture of medical terminology and the doctor's signature, and made that authority legible and quickly communicable to others. The end of the form summed up the examination as a hiring recommendation, sorting the examinee into the categories "accepted," "physically unfit," and "rejected," providing one slim line to answer the question "why?"

⁸³ Selby, *Studies of the Medical and Surgical Care of Industrial Workers*, 99.

That form, labeled “physical examination – men” indicates the gendered character of the examination process, as does the form below. The top half consisted of a standard set of questions and categories for all applicants while the second half applied specifically to women.

Figure 14. Examination form – Medical Examiner’s Report⁸⁴

MEDICAL EXAMINER’S REPORT			
Rate of pulse.....	Posture.....	Does it intermit or become irregular?.....	Cause?
Character	Feet	Measurement of Chest {	Inspiration
Height	Weight		Expiration.....
Race	General Appearance.....		Blood pressure.....
After careful inquiry and physical examination do you find any evidence of past or present disease of: Lungs or Pleurae..... Brain or Nervous System..... Heart..... Blood Vessels			Arteries palpable?.....
			Condition of teeth.....
			Is hearing impaired?.....
			Is eyesight normal?.....
			Is hernia present?.....
			Has he the mark of a successful vaccination? ..
			REMARKS
			URINE EXAMINATION
			Specific gravity..... Reaction.....
			Albumin?..... Sugar?.....
Stomach or Abdominal Organs.....			
Gained or lost any weight in past year.....			
QUESTIONS TO BE ANSWERED IF APPLICANT IS A WOMAN			
Married or single?.....		Is husband living?.....	
Is she pregnant?..... No. of children living..... Age of eldest..... Age of youngest.....			
No. of children dead.....			
Has she ever had a miscarriage?.....		Has she since had labor of full term?.....	
Has she passed the climacteric?.....		When	
Is menstruation regular?.....		Pain?	Reflex symptoms?.....
Signature		M.D. Address	
<small>Medical Examiner</small>			

Some of the questions in the medical examination scripted by this form did not bear immediately on the woman’s physical condition: being married, single, or a widow are not bodily conditions, but being married or having children could be relevant for the

⁸⁴ The top part of this form included some room for the examiner to exercise independent authority, in the form of the applicant’s “character” and “general appearance.” This form also included race as a salient characteristic upon which to collect information that would inform hiring decisions. Arthur B. Emmons, “Health in Mercantile Establishments II. Medical Records,” *The Journal of Industrial Hygiene*, vol. 2, no. 8 (December 1920): 279-285, 282.

purposes of injury liability. The form also included questions of a personal nature, including past miscarriages and how many of the woman's children had died. That these appear as data gathered indicates that they were potentially relevant to whether or not women would be hired for work, and that discussing these issues was a condition required within the application process.

Other forms were designed to be completed more rapidly. Clarence Selby's book on industrial medicine included a form from the Youngstown Sheet & Tube Company consisting of an 87 point numbered checklist designed for physicians or assistants to fill out during the exam.⁸⁵ The list included body parts broken down into specific items and one blank space for any other notable discoveries. For example, under "extremities" it listed "old fractures, old mutilation, varicose veins, ankylosed digits, wrist deformities, flat foot, bunion, ingrowing toenails." The form's checklist character emphasized speed, and its long list of conditions emphasized comprehensivity. This form also indicated the degree of integration of physicians into the hiring process, requiring physicians to indicate which physical conditions were salient for the purposes of hiring - "defects that disqualify" and "defects which do not disqualify." Collecting data on the latter would have been useful in the event of further legal change to liability: a condition that did not disqualify an applicant might become one if a court case made the condition more expensive in the event of injury.⁸⁶

⁸⁵ Selby, *Studies of the Medical and Surgical Care of Industrial Workers*, 100.

⁸⁶ Selby, *Studies of the Medical and Surgical Care of Industrial Workers*, 97-98.

After physicians reached judgments in their examinations, the judgments had to be conveyed to other personnel, another role for medical forms. The form below dealt specifically with rejections of applicants, with people who “failed to pass” the examination. This form shows the reduction of medical examinations to the question of whether applicants were admissible or inadmissible to employment.

*Figure 15. Notice of Employee’s Failure to Pass*⁸⁷

NOTICE OF EMPLOYEE’S FAILURE TO PASS PHYSICAL EXAMINATION.

Date.....

Mr....., department.....

M....., who was accepted conditionally on..... **has failed to pass the final physical examination and should be dismissed.**

Chief Surgeon.

This coupon to be sent to department chief (see G. M. I. 33. 101).

This form carried with it a statement of the company rule governing the form’s handling, noting the official to which the form should be sent in order to be sure the doctor’s recommendation was properly routed inside the organization, and citing the relevant company policy. The form also indicates the place of the medical examination in the hiring process. Examinees were “accepted conditionally” by a prior official, then given an examination to determine if that acceptance would be certified or revoked, with the result conveyed to the proper company authority.

⁸⁷ Selby, *Studies of the Medical and Surgical Care of Industrial Workers*, 94.

Figure 16. Daily Record of Examinations⁸⁸

DAILY RECORD OF EXAMINATIONS.
Medical Department, Eastman Kodak Co.

Month.....

Day.	Applicants.		Rejections.		Present employ-ees.		Grossly defec-tive.		Vaccina-tions.	Reex-amina-tions.		Teeth.					
	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	Per-fect.	Good.	Fair.	Poor.	Bad.	Ab-sent.
1																	
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27																	
28																	
29																	
30																	
31																	
Total																	

Medical forms standardized individuals' measurement against a risk-defined norm of admissibility to a company's workforce. Forms also helped companies create knowledge about their workforce as an aggregate. It took effort for companies to know themselves. Medical forms that tabulated numbers of examinations and rejections were tools for companies' self-knowledge, with which to guide their actions. The form above from Eastman Kodak shows how forms could help turn individual medical examinations

⁸⁸ Selby, *Studies of the Medical and Surgical Care of Industrial Workers*, 85.

into statistical aggregates with which companies could better know their medical and employment practices. In filling out this form, company personnel tabulated the numbers of examinations physicians conducted, numbers of applicants rejected, and the health condition of current employees. This information helped the company decide how to govern its workforce, including the industrial physicians the company employed, by producing knowledge about the numbers of examinations conducted by doctors over what period of time.

These forms were distinctly impersonal, cataloging physical conditions, with financial motivations, leading companies to reduce medical examinations to questions of labor allocation: employ this person or not? These examinations were at best only secondarily concerned with examinees' health. Employee health, let alone any of the meaning of employees' health and their lives as persons, did not fit into the epistemological framework of actuarial gatekeeping.

Medical examinations were used by industrial physicians in service of employers' financial goals, specifically risk management. Over time, the result of the speeding up and standardization of medical examination was to remove elements of care from the process. Some industrial physicians were aware of and unhappy with these outcomes. Some industrial physicians were also aware of and uncomfortable with the discrimination that resulted from their profession's actuarial deployment in the aftermath of workmen's compensation laws. In 1930 Frank Pedley, a Quebec-based specialist in industrial medicine, made a speech at the annual meeting of the International Association of

Industrial Accident Boards and Commissions, an organization of Workmen's Compensation administrators. In his talk, "Workmen's Compensation Act in Relation to Handicapped Individuals," Pedley voiced complaints which will be familiar to readers by now, arguing that as a result of Quebec's workmen's compensation law "[m]any employers are unwilling to engage men with various handicaps, particularly men who have lost an arm, or a leg, or the sight of one eye, because if the opposite member should be lost the liability is very materially increased."⁸⁹ He suggested that "[s]uch men [as] are usually classed by medical examiners as substandard risks (...) frequently fail to secure employment in consequence. Yet is it to be assumed that all these individuals are to be deprived of the opportunity to earn a livelihood?" Pedley sardonically remarked, "Starvation is not a satisfactory treatment for the handicapped."⁹⁰ Pullman's medical director Thomas Crowder was present during Pedley's speech, and was the first person to respond in discussion. Crowder said that "[a] job is the thing the handicapped workman needs most. Without it the extra compensation he might receive for injury is entirely nonoperative. The remedy for this condition is not a medical one, but a remedy is what is needed."⁹¹ Crowder knew well the non-medical condition he spoke of, that of needing a job, the cure for which was placed out of reach for many people. As Crowder wondered in a memo, when it came to workplace physical examinations, "[t]he question which

⁸⁹ United States Bureau of Labor Statistics, *Bulletin of the Bureau of Labor Statistics* 536 (1931), 249-250.

⁹⁰ United States Bureau of Labor Statistics, *Bulletin of the Bureau of Labor Statistics* 536 (1931), 251.

⁹¹ United States Bureau of Labor Statistics, *Bulletin of the Bureau of Labor Statistics* 536 (1931), 252.

immediately occurs to me is, who hires those rejected?”⁹² While he felt ambivalent about the effects of physical examinations, Crowder still advocated for and presided over Pullman’s formulation and implementation of a plan of medical examinations. Similarly, in 1915 James Harrar, the director of the Medical Department at Lord and Taylor’s department store in New York had said about medical screening of employees, “the procedure is a selfish one,” adding that

[t]he question promptly arises what is to become of these impaired individuals as one large concern after another comes to demand a physical examination before employment? In a general way, it cannot be said that the employer is responsible for rejected applicants; on the other hand, it is most difficult to decide who is responsible.⁹³

Still, like Crowder, Harrar justified the procedure. Harrar’s justification hinged on a comparison with insurance. Physical examinations at work “follow[ed] very closely the extent of an ordinary life insurance examination” and with the same point: “to weed out all impaired applicants.” Harrar’s use of insurance as a metaphor to justify medical examinations appealed to a kind of intuitive or common sense understanding of what was fair: of course insurance involves medical examination, and since compensation laws had made work into an insurance relationship, of course work must involve medical examinations. This kind of implicit ‘of course’ is an example of what historians and theorists have called hegemony, which means, as historian Mary Kupiec Cayton has put

⁹² T.R. Crowder, “Medical Examinations – shops,” Undated. Employee and Labor Relations, Medicine and Sanitation, Administrative Subject Files, Pullman Corporation Records.

⁹³ James Harrar, “How a Large Department Store Conserves the Health of Its Workpeople,” *Safety: Bulletin of the American Museum of Safety* vol. 3, no.3 (March, 1915), 67-71. Harrar and others recognized the importance of money in individual and familial reproduction in capitalism, the importance of wages as the avenue for access to money, and the serious reproductive (or non-reproductive...) ramifications that wagelessness could have for working class people.

it, “skewing conversations in a way that made life in the existing order seem good, right, true, natural, and inevitable,” a practice which inaccurately represents “the life experiences of all but those with a vested interest in maintaining the status quo.”⁹⁴ With medical examinations, employers and industrial physicians both maintained and revised the status quo of employer power and commodification of wage-earners, a process they treated as required for business.

By the early 1930s employers across the United States had begun to practice medicalized employment discrimination. As Pullman’s David Crawford said in 1934, “there is every reason to prevent by adequate pre-employment examination the addition of people who are below grade to start with and likely to get no better fast.”⁹⁵ Thomas Crowder concurred, stating that “it is my opinion that ALL employes [sic] should receive a rigid pre-employment examination and periodic thereafter” in order to control costs. This new employment discrimination did not go unopposed. Unions noted the rise of medicalized employment discrimination and sought to stop it through lobbying, protests, and strikes, as chapter seven argues.

⁹⁴ Mary Kupiec Cayton, “What is Public Culture? Agency and Contested Meaning in American Culture - An Introduction,” in Marguerite S. Shaffer, ed., *Public Culture: Diversity, Democracy, and Community in the United States* (Philadelphia: University of Pennsylvania Press), 1-28, 7. My understanding of hegemony is especially informed by Eugene Genovese, *Roll, Jordan, Roll: The World the Slaves Made* (New York: Vintage, 1976), 25-48. As political theorist Wendy Brown has put it, “dominant discourses render their others silent or freakish in speech by inscribing point-of-viewlessness in their analysis and adjudications of value. The powerful are in this way discursively normalized, naturalized.” Wendy Brown, *States of Injury: Power and Freedom in Late Modernity* (Princeton: Princeton University Press, 1995), 167.

⁹⁵ D.A. Crawford to L. S. Hungerford, April 10, 1934. Administrative Subject Files, Employee and Labor Relations, Medicine and Sanitation, Pullman Corporation Records, Newberry Library, Chicago, Ill.

Walter Waite, November 13th-21st, 1909.

Walter Waite spent eight days trapped underground in Cherry with a group of his co-workers. The men prayed and sang hymns together. One man whistled to distract himself. All of the men wrote letters to their families. George Eddy wrote, "I write these lines to you and I think it will be for the last time. I have tried twice to get out, but was driven back. There seems to be no hope for us. I came down this shaft yesterday to help save the men's lives. I hope the men I got out were saved."

The miners had almost no food. In the midst of these hunger pangs, Waite told a story, explaining to his fellow miners that he had once bought a bag of bananas from a fruit vender in Chicago. At the mention of food, several miners demanded that Waite stop telling the story and stop talking about food. Waite related how he had been sold a bag of a dozen bananas that actually contained only ten. Upon finding he had been shorted, Waite ate the remaining ten bananas. After his rescue from the Cherry Mine Waite smiled while he told journalist Edith Wyatt the story about teasing his co-workers through storytelling, a story about teasing his co-workers about food despite their protests.

Waite told another story to Edith Wyatt. He could feel the airflow changing after rescue workers unsealed the mine. The mine had been sealed off to deprive the fire of oxygen. He reminded his fellow miners repeatedly that the change in airflow meant that rescue workers were looking for them. Waite told his fellow miners a story about the

*rescue to try and avoid despair. "Don't give up. We are going to give those people up there the very biggest surprise they ever had."*⁹⁶

⁹⁶ Edith Wyatt, "Heroes of the Cherry Mine," *McClure's Magazine*, vol. 34, no. 5 (March, 1910): 473-492.

Chapter Seven. Union Opposition to Physical Examinations: Moral Economy and the (De)Politicization of Employment Discrimination

Employers and industrial physicians discussed medicalized employment discrimination as a financial and a technical matter resulting from the ostensibly inevitable workings of the economy. Some management personnel, like Thomas Crowder and Frank Pedley, seem to regret this course of action. Unions objected more strenuously to employment discrimination. When they did so, they treated physical examinations and employment discrimination as a political and ethical matter, instead of as simply an apolitical business necessity. Unions across the United States were already opposing discrimination under compensation laws by 1914.

In their opposition to physical examinations, as in their efforts to shape employer and state behavior more generally, unions asserted claims about how society should be governed.¹ With regard to physical examinations, these claims formed two basic types: appeals to state authority, whether to change the law or to change employer behavior, and unions' own attempts to change employers' behavior directly. An Iowa labor assembly urged political action against the new pressures on workers introduced by compensation laws, calling on the government to "protect our more unfortunate brothers to retain their

¹ As historian Andrew Wender has put it, unionized "[c]raft workers insisted that within their trades, they were the government" and the arbiter of what products, practices, and relationships were legitimate. Andrew Wender Cohen, *The Racketeer's Progress: Chicago and the Struggle for the Modern Economy, 1900-1940* (Cambridge, UK: Cambridge University Press, 2004), 65.

employment.”² Delegates at an American Federation of Labor convention that same year similarly called for changes to the law.³ At that convention the AFL’s Executive Council reported that “the attention of workers should be called to a condition dangerous to their welfare which has developed out of social insurance and welfare provisions — the requirement of physical examination of workers as a condition requisite for employment or for continuation of employment.”⁴ One convention delegate, P.J. Conlon from the Alexandria, Virginia Trades Council, put forward a resolution criticizing physical examinations. Conlon’s resolution decried “[t]he tendency of employers of labor to force upon their employes a physical examination, under the pretext that it is a necessary requirement to comply with the compensation laws.” Conlon’s resolution called for the AFL to formulate a response to the issue of physical examinations, a response which would “become the universal policy of all affiliated unions in this matter.”⁵ The AFL Convention did not pass Conlon’s resolution, because it passed a resolution from Frank Dujay, the president of a local federation of electrical workers in New York. Dujay’s

² Ottumwa Trades and Labor Assembly to Governor Clarke, Dec. 31, 1914, Multiple Governors Correspondence, State Historical Society of Iowa, State Historical Society of Iowa, Des Moines, Iowa.

³ *Insurance Monitor*, January 1914, 602. See the *Weekly Underwriter*, November 21, 1914, 592.

⁴ American Federation of Labor, *Report of the Proceedings of the Thirty Fourth Annual Connection of the American Federation of Labor Held at Philadelphia, Pennsylvania, November 9 to 21* (Washington, D.C.: Law Reporter Printing, 1914), 67.

⁵ AFL, *Report of the Proceedings of the Thirty Fourth Annual Connection*, 417. These statements forms part of unions’ processes of self-governance. Unions are institutions of governance, governing themselves, their members, other unions, and waged workplaces. As such, the interaction between law, employers, and unions was the interaction between multiple centers of governing authority. These different authorities could and did conflict, as they imagined and sought to create different relationships among the ensemble of institutions governing American economic life. Like states, businesses, and other institutions of governance, unions ‘puzzle before they power.’ Hugh Hecllo, *Modern Social Politics in Britain and Sweden: From Relief to Income Maintenance* (New Haven: Yale University Press, 1974), 305, and Margot Canaday, *The Straight State: Sexuality and Citizenship in Twentieth-Century America* (Princeton: Princeton University Press, 2009), 3.

resolution asserted that the AFL should demand a change in the law to make pre-employment physical examinations illegal.⁶ In this resolution, the AFL affiliated unions proposed to deal with the problem of physical examination by lobbying state government to amend compensation laws. These were not the only appeals unions made for government intervention.

Dujay worked at the General Electric plant in Schenectady, New York. Earlier in 1914 G.E. had implemented physical examinations in response to compensation laws, as discussed in chapter four. Dujay called for the New York State Industrial Commission to do something, but the Commission declared itself powerless. Members of the AFL argued to the New York compensation commission that “the privilege of employers being self-insurers” should be removed from the workers’ compensation statute. Robert E. Dowling, chair of the New York commission, responded by arguing that “the law should not be amended, but in such cases as the Federation of Labor suggested, there should be a complaint lodged with the commission. If after an Investigation [sic] such discrimination was found, he should not be allowed to act as a self-Insurer under the provisions of the law.”⁷ In part, Dowling was arguing about which part of state government ought to act in order to respond to this problem. Discrimination by self-insurers was not, Dowling suggested, an issue for the legislature to take up. Rather, the issue could be taken up administratively by the commission overseeing workmen’s compensation. Having gotten no satisfaction from the commission, Dujay took up the G.E. workers’ objections through

⁶ AFL, *Report of the Proceedings of the Thirty Fourth Annual Connection*, 257.

⁷ *The Spectator*, December 24, 1914, 356.

the AFL and called for legislation. The events in Schenectady were what New York Industrial Commissioner John Mitchell to criticize employers' use of physical examinations.⁸ Even though the commission could not force G.E. to change its behavior, Mitchell could add his voice to the chorus of objections. This may have also influenced the AFL's call for legislative change, since the agency administering the compensation law could not resolve the matter.

Ultimately, the 1914 AFL convention passed a resolution calling for elimination of employers' liability insurance companies from the compensation system and the establishment of state insurance companies with funds administered by the state compensation commissions.⁹ In 1916 John P. White, President of the United Mine Workers of America issued a similar call for the state to organize workmen's compensation insurance. In a speech at a conference on social insurance in Washington, D.C., White said that physical examinations were so serious a matter that, if they were to happen at all, they

should be undertaken only on the assurance that the public welfare demands it and that the results are worth the sacrifice of that personal sanctity which our institutions have thrown about the individual. This, in my judgment, is another way of saying that the state, not the employer, should undertake such examination, assuming always that public policy demands compulsory examination at all. (...) If physical examination of all persons is demanded on the broad grounds of social welfare, then let it be administered by the state.¹⁰

⁸ See the discussion in chapter 6.

⁹ AFL, *Report of the Proceedings of the Thirty Fourth Annual Connection*, 96.

¹⁰ John P. White, "Compulsory Physical Examination," *The Shoe Workers' Journal* vol. 17, no. 12 (December, 1916): 3-4. White here depicted the state as the representative of society and the guardian of social welfare, occupying a similar conceptual framework as the social liberals discussed in chapters one and two.

The call for state insurance and state-run physical examinations amounted was a demand to remove the construction and distribution of risk pools to private insurance markets or self-insuring employers.

Union officials objected to insurance serving as what legal scholars Tom Baker and Jonathan Simon have called “delegated state power.” Baker and Simon write that the state often chooses to forego creating its “own criteria for access to vital economic freedoms like operating an automobile or a business (which would be politically controversial and even, perhaps, unconstitutional).” Instead “the state mandates that a person wishing to engage in any such activity first obtain some form of insurance.” This hands over decisions about who can engage in those “vital economic freedoms” to insurers. “Motivated by controlling losses they have contracted to pay, the companies set up their own norms of conduct, which they enforce.” Insurance is thus “one of the greatest sources of regulatory authority over private life.”¹¹ With regard to injury law and physical examinations, the AFL opposed the re-organization of employers’ governing power in the form of actuarial gatekeeping. In calling for state insurance rather than market insurance, the AFL hoped to de-link employment and insurance and thus alleviate incentives toward employment discrimination.

The AFL and John White both proposed state-centered solutions to the problems created by employers’ responses to workmen’s compensation, as did the General Electric workers with their call for the New York Industrial Commission to intervene against

¹¹ Tom Baker and Jonathan Simon, “Embracing Risk,” in Baker and Simon, eds., *Embracing Risk: The Changing Culture of Insurance and Responsibility* (Chicago: University of Chicago Press, 2002), 13. The same could be said of employment.

employment discrimination. This attempted use of the state conflicts with characterizations of early 20th century U.S. unions by some labor historians. Historian William Forbath describes the American labor movement from the 1890s through the 1930s as committed to what he calls voluntarism, a political philosophy preferring that the employment relationship be organized through (and the labor process be governed through) union-employer negotiation. According to this philosophy, “workers should pursue improvements in their living and working conditions through collective bargaining and concerted action in the private sphere rather than through public political action and legislation.” Forbath calls this “labor's version of laissez-faire,” which he considers an anti-statist philosophy. Forbath argues, however, that “voluntarism never meant abstention from politics” but rather the rejection of active state regulation of economic life.¹²

The American labor movement was actually quite politically active in pursuing a reform agenda from the 1870s through the 1890s; that the labor movement became more voluntarist was the result of the failures of the reform program, as unions concluded that the U.S. state was not an arena in which workers could successfully achieve their aims. As Forbath puts it, “the rise of voluntarism as the movement's dominant collective outlook was a matter of necessity and grudging accommodation.”¹³ On Forbath's account,

¹² William Forbath, *Law and the Shaping of the American Labor Movement* (Cambridge, MA: Harvard University Press, 1991), 1-2. Alice Kessler-Harris argues that the American Federation of Labor was voluntarist in large part as a preference for a kind of masculine collective action. Alice Kessler-Harris, *In Pursuit of Equity: Women, Men, and the Pursuit of Economic Citizenship in 20th-Century America* (Oxford: Oxford University Press, 2001), 67.

¹³ Forbath, *Law and the Shaping of the American Labor Movement*.

by the opening of the twentieth century the U.S. labor movement had narrowed its state-centered ambitions primarily to attempting to overturn judicial decisions. This emphasis also helped the labor movement take up a language of legal right in an individualist liberal frame, of freedom from state intervention.¹⁴ Unions' call for state intervention over physical examination and state insurance of compensation liabilities do not fit within this characterization of the labor movement.

The view of unions as voluntarist does track onto a tendency within U.S. unions; union voluntarism centered on collective bargaining, in the sense that unions preferred to deal with problems by negotiation with employers rather than by state intervention, and in the sense that unions preferred that the force compelling employers to negotiate be the union, not the state.¹⁵ This perspective did not mean simple political abstention, however. Scholarly literature on labor union voluntarism recognizes that unions were involved in politics but argues that the use of state power in this vision was a limited one. Political scientist Ruth Horowitz characterizes the early 20th century labor movement as voluntarist but as accepting and actively calling for legislation which preserved unions as legitimate actors, restricted entry to labor markets (thus controlling labor supply in a way that promoted scarcity, which worked in favor of craft unions), and reducing the pressures of competition on workers. This required that unionists run for political office

¹⁴ Forbath, 169.

¹⁵ Ruth O'Brien, *Workers' Paradox: The Republican Origins of New Deal Labor Policy, 1886-1935* (Chapel Hill: University of North Carolina Press, 1998), 66, 210, 213. See also Josiah Bartlett Lambert, "*If the Workers Took a Notion*": *The Right to Strike and American Political Development* (Ithaca, NY: Cornell University Press, 2005); and Michael Rogin, "Voluntarism: The Political Functions of an Antipolitical Doctrine," *Industrial and Labor Relations Review*, vol. 15 no. 4 (July, 1962): 521-535.

and serve in administrative offices, but they did so largely to create or preserve room for unions to operate in society. That is, they largely held the state at bay, clearing room for unions to operate as institutions of non-state governance.¹⁶

There certainly was a voluntarist sensibility in early 20th century U.S. unions, and as Forbath and others have shown, it was fed by the failure of reform efforts due to judicial undercutting of legislation and by the experiences of judicially authorized state repression. Unions did not just limit themselves to collective bargaining, however, but made arguments about how society more generally should be governed, as with the AFL's response to physical examinations and compensation insurance. Union calls for state insurance of employers' risks under workmen's compensation and for state intervention against employment discrimination do not fit easily within the portrait of the labor movement as voluntarist, as they were calls for active, positive state intervention into a new area of social life rather than just politically keeping the state at bay.

In addition to lobbying and calling for legislative change, unions opposed the extension of physical examination and employment discrimination through strikes. At the 1914 AFL convention Frank Dujay called on AFL affiliates to "refus[e] to permit their membership to stand for any kind of physical examination" tied to compensation laws. This was an attempt to get unions to govern their members in such a way that would shape employers' behavior. Dujay's proposal is another reminder that unions were groups of people governing themselves, in the sense of shaping each other. Union conventions

¹⁶ Ruth L. Horowitz, *Political Ideologies of Organized Labor: The New Deal Era* (New Brunswick: Transaction, 1978), 36.

and communications were not a process of simply relaying pre-existing information but were part of constitutive process of building and maintaining collective opinion within unions. The 1914 convention did not pass Dujay's resolution. Such a policy would have amounted to a requirement for union members to strike whenever an employer practiced physical examinations, at least examinations of union members. Even without Dujay's idea becoming AFL policy, there were such strikes. G.E. workers had threatened to strike and another delegate at the 1914 convention noted that there had been strikes over physical examinations in New York in two different union locals.¹⁷

In 1917 the Executive Board of United Mine Workers District 12 in Illinois decided to "serve notice" to mining companies that the union disapproved of companies "requiring applicants for employment to pass a physical examination as a result of Illinois' workmen's compensation law. The Miners' Union will not tolerate the establishment of this practice in Illinois," the union wrote to the companies, "even though we may be put to the undesired necessity of ordering a strike to prevent it being done." Employers had introduced physical examinations to control one kind of uncertainty, uncertainty of costs as introduced by workmen's compensation laws. The UMW replied to mine owners by threatening another kind of uncertainty, disruption of business by strikes.¹⁸

Again in 1917, the same year as the United Mineworkers conflict with the Illinois mine owners, miners affiliated with the Industrial Workers of the World struck in Bisbee,

¹⁷ AFL, *Report of the Proceedings of the Thirty Fourth Annual Connection*, 824.

¹⁸ F. Farrington, "Oppose Physical Examination of Workers," *United Mine Workers Journal*, vol.28 no.16, (August 16, 1917), 7.

Arizona.¹⁹ While the IWW and United Mine Workers were not on particularly friendly terms, the United Mine Worker Journal ran an article by Harold Callender portraying the strikers and their demands sympathetically. First on the list of demands was “abolition of the physical examination required now by the companies.”²⁰

The 1917 miners’ strikes were not the last time unions took up the issue of physical examinations. Strikers listed the end to physical examinations in their demands in the 1919 steel strike in Pennsylvania which led to the Great Steel Strike that shut down much of the steel industry.²¹ In 1921 an IWW publication ran an article in arguing that railroads had introduced both age limits and physical examination in response to railway workers’ strikes as early as 1894. In 1922 the International Association of Machinists issued a nine point platform of its political and social aims, which included “abolishing

¹⁹ For more on the history of the Bisbee strike, see Melvyn Dubofsky, *We Shall Be All: A History of the Industrial Workers of the World* (Chicago: Quadrangle Books, 1969), 10-11, 220-224.

²⁰ Harold Callender, “Copper is King: Facts About the Bisbee Deportation,” *United Mine Workers Journal* vol. 28 no.18 (August 30, 1917), 9. For another contemporary account of events in Bisbee, see “The Arizona Copper Strike,” p468-468, *The Outlook*, July 25, 191, 466-468. During the Bisbee strike, a group of business and political officials put out a pamphlet supporting the Phelps Dodge Company. The pamphlet defended physical examinations and listed reasons for rejection that will be familiar to readers by now: “In order to protect the safety of employees as well as to guard the employers from undue loss through the operation of the Compensation Act and the Employers’ Liability Law, all applicants for employment are required to pass a physical examination. No one afflicted with any contagious disease such as syphilis, tuberculosis, or chronic ulcers will be accepted. In addition, defective eyesight, or the loss of an eye, rupture, kidney disease, or heart disease, are causes for rejection. Men over 45 years of age are advised to correspond with mining companies before coming to the district.” “Mining Conditions in Bisbee Arizona,” in University of Arizona Library Special Collections, *The Bisbee Deportation: A University of Arizona Web Exhibit*, Online, Internet <http://www.library.arizona.edu/exhibits/bisbee/docs/mincon.html> accessed March 1, 1914.

²¹ Jacob Margolis, “The Present Crisis in the Steel Industry,” *Socialist Review* vol. 8 no.1 (December, 1919), 31. The strikers’ demands were recognition of the union, collective bargaining, an eight hour work day, an increase of pay, the abolition of physical examinations and the check off system. For another contemporary account which also mentions the end to physical examinations as a demand in this strike, see “Steel Strike Declared in Industry,” *Locomotive Firemen and Enginemen’s Magazine*, vol. 67 no. 6, (September 15, 1919), 10-12. For an overview of the steel strike, see David Brody, *Steelworkers in America: The Nonunion Era* (Cambridge: Harvard University Press, 1960), 231-262.

personal record and physical examination requirements.”²² Again in 1927 IWW affiliated miners struck listing the end of physical examinations among their demands, this time in Colorado.²³

Unions’ resistance make it clear that they opposed physical examinations, but what did they see as the problem? One objection was the unilateral character of the decision to change hiring practices. Unions’ recourse to threats of striking and actual strikes was in an important sense more conflictual than the AFL’s appeal to the state. On the other hand, these responses, and particular in the letter that the UMW sent to the mine owners, took employers as a kind of negotiating partner. This involved an implicit claim to a right to govern, a claim which is likely implicit in any form of unionization. It also involved a sense that employers could be bargained with, which is to say, a sense of employers and unions as engaged in the shared governance of economic life. As discussed in chapter two, Samuel Gompers and others in the labor movement took part in the National Civic Federation. In relation to injury law, the NCF sought to encourage both employer and union support for compensation laws. More broadly the NCF sought to cultivate a sense among businesses and unions that the two could co-exist, that they could sit across from each other at a bargaining table.²⁴ This sensibility (or at least the

²² International Association of Machinists, “Declaration of Principles,” *Machinists Monthly Journal*, vol. 34, no.1 (January 1922), 5.

²³ Jonathan Rees, “X, XX, and X-3: Spy Reports from the Colorado Fuel & Iron Company Archives,” *Colorado Heritage* (Winter, 2004): 28-41; 29-30.

²⁴ This idea can be called industrial pluralism, which Christopher Tomlins describes as the idea that all conflict can be managed; that there are no genuinely intractable conflicting interests in society, provided the right institutional mechanisms for conflict management are built. Tomlins, *The State and the Unions. Labor Relations, Law, and the Organized Labor Movement in America, 1880-1960* (Cambridge University Press, 1985), xi.

manifestation of this sensibility in the form of a willingness to negotiate) declined among American employers in industry, in the form of union avoidance or suppression measures in the first decades of twentieth century, also known as the open shop drive.²⁵ The open shop drive had important intellectual, political, and theoretical roots and was not reducible to an effect of economic changes. That said, virulent anti-union efforts arose out of the corporate re-organizations of the late 19th and early 20th centuries, and unions often saw this re-organization as making businesses become more unilateral in their dealings with workers.²⁶ A similar unilateralism characterized employers' changed hiring practices in response to injury law reform. Unions' objections to physical examinations were in part objections to the extent of employers' power to govern and manner of governing over working class people.

Many union critics saw physical examinations as implicitly unilateral in another sense. They saw examinations as a convenient way for employers to get rid of union supporters who wanted a say in how things were done. The AFL's 1914 convention said that union members were often dismissed based on examination results. The resolution

²⁵ On the open shop drive, see Rosemary Feurer, *Radical Unionism in the Midwest, 1900-1950* (Chicago: University of Illinois Press, 2006), 7-10; Clayton Sinyai, *Schools of Democracy: A Political History of the American Labor Movement*, (Ithaca, NY: Cornell University Press, 2006), 57-71; David Montgomery, *The Fall of the House of Labor: The Workplace, the State, and American Labor Activism, 1865-1925* (Cambridge: Cambridge University Press, 1986), 269-275; Andrew Wender Cohen, *Racketeer's Progress*, 158-167; and Howell John Harris, *Bloodless Victories: The Rise and Fall of the Open Shop in the Philadelphia Metal Trades, 1890-1940* (Cambridge: Cambridge University Press, 2000).

²⁶ See for example the preamble to the constitution of the Industrial Workers of the World, which pointed to larger scale corporate industrial operations as requiring aggregations of unions larger than the craft divisions of the American Federation of Labor. See Industrial Workers of the World, *Proceedings of the First Convention of the Industrial Workers of the World* (New York: New York Labor News, 1905; reprinted by Merit Publishers, New York, 1969).

called physical examinations “a scientific blacklist under professional guise.”²⁷ The criteria for physical examinations being what they were, many union supporters likely were ‘impaired’ according to employers’ standards.²⁸ As chapter six showed, medical examinations at Pullman in 1926 found an average of 1.5 impairments per person, and found some measure of impairment in over 75% of applicants. In addition, earlier chapters argued, in the early twentieth century many people who worked for wages took the chance of injury regularly in the course of their employment. If impairment became grounds for dismissal, a great many people could be fired, opening up room for employers to dismiss union members without having to discuss their union membership. In 1918 members of the International Typographical Union put forward a resolution this effect, stating that physical examinations made it “easy for the unfair employer to discharge those employes [sic] who, believing in organization and the freedom of the worker, seek to have their fellow workers join the organization of their craft” and added that “under physical examination of the worker in a period of depression [an employee] would be virtually chained to his job.”²⁹ Thus ‘chained’, workers would have less power to negotiate, and with fewer union members to deal with, employers would have greater latitude to run workplaces as they saw fit.

This criticism was widespread. Workers in the 1919 steel strike believed physical examination were “used for the purpose of blacklisting any worker who has shown any

²⁷ AFL, *Report of the Proceedings of the Thirty Fourth Annual Connection*, 417.

²⁸ See Sarah Rose, “‘Crippled’ Hands: Disability in Labor and Working-Class History,” *Labor: Studies in Working-Class History of the Americas*, vol. 2 (2005): 27-54.

²⁹ “Resolutions,” *The Typographical Journal* vol. 53 no.3 (September, 1918), 249.

disposition to oppose the steel owners.”³⁰ Members of the United Mineworkers believed companies used the examinations to blacklist union activists, and the IWW called physical examinations “nothing more or less than a blacklist; a club in the hands of the masters.”³¹ It is no surprise that unions should object to what they considered an attack on the very existence of unions by attacking anyone who wanted to join a union. Unions’ criticisms of physical examinations were more expansive than this, however.

The 1914 AFL convention said that physical examinations “eliminate[ed] workers whose health has been impaired by the work. These methods decrease costs of production by creating an unemployable class.”³² On this characterization, employers profited from workers’ labor, damaged workers’ ability to labor, then ejected the damaged persons from employment, profiting by consigning these work-damaged persons to wagelessness. The point had a ring of broken deals to it, that workers’ were not getting what they thought were getting in exchange for the sale of their labor power.

In his 1916 remarks, UMW President John White described “[c]ompulsory physical examination” as “an interference with the personal life of the individual.” In addition to an appeal to individual freedom, White invoked a social perspective. He described companies as engaged in the “weeding out of men not physically perfect by physical examination.”³³ This did not just have effects on those ‘weeded out.’ White

³⁰ Margolis, “The Present Crisis in the Steel Industry,” 31.

³¹ On the UMW see Callender, “Copper is King,” 9. The IWW quote is from W.J. Lemon, “The American Railway Industry and its Workers,” *Industrial Pioneer* vol.1 no.8 (September, 1921), 15. On the history of unions’ anti-blacklisting efforts see Forbath, *Law and the Shaping of the American Labor Movement*, 177-178.

³² AFL, *Report of the Proceedings of the Thirty Fourth Annual Connection*, 67.

³³ White, “Compulsory Physical Examination,” 3-4.

argued that with industry organized for private profit, medicalized employment screening could mean

only that those who pass the test will be subjected to greater strain than previously. The late Professor Hoxie of Chicago University, after conducting a thorough investigation of scientific management, expressed the opinion that the greatest danger now threatening the American wage earner is the speeding up of industry and the consequent physical strain imposed upon the worker. This meant we must regard the entrance of a number of physically unfit men into industry as a blessing, if it serves to check the tendency toward more speed and greater strain. As modern industries are organized today, the rejection of unfit men, means, not the protection of those who are accepted, but license to increase the strain upon them so that eventually they, too, or their descendants, will be added to the class of the unfit. In this respect the fate of the physically fit is like that of the flower of European manhood, maimed and slaughtered on the battlefield.

White quoted another union official, Andrew Furuseth, saying that industry would “scrap the whole human race if they keep on” and continued that “We are in great danger of losing entirely the human equation in industry, and with it the freedom of the individual. Like many others in this era, White combined humanitarian with economic efficiency arguments:

This is not only inhuman and intolerable from a humane standpoint, but it is not efficient. Human nature is too complex to measure men with a yardstick. Some of the greatest inventors and mechanics, not to mention statesmen and even soldiers, have been men who could never have passed the rigid physical tests imposed by some of our modern industrial corporations whose managers have gone mad over efficiency. Many a young man, who might later invent a device which would revolutionize that particular industry, would be rejected and discouraged probably turned aside from what should have been his life work. (...) It is certainly putting the cart before the horse to demand the weeding out of all save the physically perfect, while at the same time we permit low wages and poverty to continue to make physical fitness difficult or impossible to achieve.³⁴

³⁴ White, “Compulsory Physical Examination,” 3-4.

Physical examinations might be profitable in the short term for the company conducting the examinations, White argued, but the results were bad for society and the economy as a whole.

The turn to physical examination would help lock in low wages in industry, White argued. He called medical examinations

a short cut to remedying a condition which is due to the fact that wages are too low to permit wage earners, as a class, to spare the means for doing what otherwise they would voluntarily do, and without prompting from any authority—that is, to consult the physician as frequently as necessary. (...) The fear of organized labor and lovers of human freedom generally is that low wages will become so buttressed by remedial measures of this sort that the public conscience will be dulled into an acceptance of low wages as a permanent institution.³⁵

White's remarks display a sense of the role of waged income in social reproduction for working class people under capitalism. Income levels formed part of the social conditions which helped create the physical conditions that employers found unacceptable in employees and applicants. Low wages, in turn, would have negative social and reproductive results, creating more of the conditions that created physical impairment, White argued. More generally, in White's speech and throughout the union response to physical examinations, unions sought to change the particulars of workers' commodification but above all sought to preserve that commodification, in the sense that they sought to prevent employers from deciding that subsets of the working class were no longer employable.

³⁵ White, "Compulsory Physical Examination," 3-4.

When the UMW demanded an end to physical examination in 1917, it evoked a similarly social perspective, as well as a duty for employers to care for employees. “The compensation law does not give to the operators the right to require men to pass a physical examination before securing employment. Furthermore, examinations would work a great injury and injustice to thousands of men employed in the mines of Illinois.” The union declared in no uncertain terms “that the coal companies must employ the physically unfit as well as the physically fit, and that for us to take this position is working no injustice to any particular coal company, for the reason that every coal company will be required to do identically the same thing.”³⁶ The union continued, “We hold that it is the duty of the industry to take care of its physical wrecks, as well as the physically fit, and that from a standpoint of humanity and justice it devolves upon those who have charge of the industry to see that this is done.” District Twelve’s President, F. Farrington, informed members of this decision in an official circular titled plainly “Oppose Physical Examinations of Workers.” The circular added that “we shall oppose with all the strength of our organization any attempt on the part of the coal operators to establish a practice which means that men who cannot pass a physical examination are to be discarded and scrapped as industrial wrecks.”³⁷ These voices of protest contested employers’ right to break the wage contract in response to their new actuarial concerns,

³⁶ The union here displayed an attitude Ruth O'Brien noted in the early 20th century labor movement, that unions could create improvements for workers “without violating the individual rights of either workers or employers.” O'Brien, *Workers' Paradox*, 8.

³⁷ Farrington, “Oppose Physical Examination of Workers,” 7.

both because of the negative social effects of this decision and for the effects on the discarded persons.³⁸

A strike statement by the IWW miners appealed to the experience of physical examination, writing in what was probably intended as a pointed joke, “We do not propose to be stripped before going to work and then be stripped again when we get our paycheck. One of the strippings must be abolished now. We will tend to the other later.”³⁹ The comparison may have been humorous to some readers, or it may have been angry, or both. Regardless, this remark draws attention to the fact that some workers must have found the requirement to partially or fully disrobe before and be handled by a doctor, perhaps one moving quickly and in dehumanizing fashion according to what Youngstown Sheet and Tube’s company physician P.H. Kennedy had called “mass production methods.”⁴⁰ The IWW remark also appealed to sense of a right to control one’s body.

These objections provide a window into the moral economy of workers’ opposition to physical examinations, which is to say, the normative order or orders that workers and unions drew upon in their evaluations of their social world. The term comes from E.P. Thompson’s famous article, “The Moral Economy of the English Crowd in the

³⁸ Unions here contested employer control over hiring and the legal arrangement creating that control, specifically the doctrine of at-will employment, which was the particular legal form of organization of employers’ power over employment in the late 19th and early 20th century United States. For a discussion of at-will employment, see the introduction to this dissertation.

³⁹ T.A. Rickard, “Labor Agitators, Mr. Roosevelt, and Others,” *Mining and Scientific Press*, August 18, 1917, 242.

⁴⁰ P.H. Kennedy, “The Policy and Value of Pre-Employment and Periodic Check-Up Physical Examinations,” 18, in “Clinic on Health in Industry, under the Auspices of the Mahoning Valley Industrial Council with the Trumbull County Manufacturers’ Association, the Ohio Manufacturers’ Association, and the National Association of Manufacturers.” Youngstown Country Club, Youngstown, Ohio, October 2, 1940. National Association of Manufacturers records, Series 7, Industrial Relations Dept. Records, Hagley Museum and Library, Wilmington, DE.

Eighteenth Century” and the conversation the article helped to initiate. Thompson focused in part on the “legitimizing notion[s]” of “the common people” in food riots.⁴¹ The point is that people in struggle have normative ideas and these norms should be investigated. Thompson’s analysis was about access to means of subsistence, and whether that access would be determined by employers according to depoliticized ideas like market price, or by ideas of justice and right. This was a kind of double disagreement. One disagreement was simply over who would and would not get access to goods. Thompson stressed, however, that the issue was not simply that hungry people will fight for food. Rather, there was a second disagreement, which was over whether or not markets and prices were (or should be) subject to moral and political consideration. Marsha Pripstein Posusney identifies the core of “the moral economy approach” with understanding that collective action is a response to violations of norms and standards to which the subaltern class has become accustomed and which it expects the dominant elites to maintain.”⁴² Ibrahim Abdullah refers to a moral economy as “a set of expectations and obligations that both rulers and ruled accept. A violation of this consensus - such as an increase in the price of basic necessities or unfair wages - constitutes a breach of the moral economy.”⁴³

⁴¹ E.P. Thompson, “The Moral Economy of the English Crowd in the Eighteenth Century,” in E.P. Thompson, “Customs in Common: Studies in Traditional Popular Culture” (London: Merlin Press, 1991) 185-258, and “The Moral Economy Reviewed,” also in *Customs in Common*, 259-351.

⁴² Marsha Pripstein Posusney, “Irrational Workers: The Moral Economy of Labor Protest in Egypt,” *World Politics*, vol. 46, no. 1 (October, 1993): 83-120, 85.

⁴³ Ibrahim Abdullah, “Rethinking the Freetown Crowd: The Moral Economy of the 1919 Strikes and Riot in Sierra Leone,” *Canadian Journal of African Studies / Revue Canadienne des Études Africaines*, vol.28, no. 2 (1994): 197-218, 198.

Historians' uses of moral economy as a category often focuses on the introduction of new changes that violated a prior implicit agreement in a way that people believed was wrong. Many workers clearly found the discriminatory effects of the extension of actuarial risk-shedding practices into employment to be one such wrongful change. Union members did not just oppose the loss of their jobs because they needed money. They saw this loss as wrong and as illegitimate. Union members here rejected the moral or cultural authority of employers and, at least implicitly, of the legal arrangements that underwrote employers' authority. The law and employers were not the only center of gravity for workers' normative claims about the world.

Workers' moral economy could include ideas about when the state should intervene. Some unions expressed a belief that the state should intervene to prevent medicalized employment discrimination. The labor movement's moral economy also overlapped with the state in the sense that men like John Mitchell from the UMW became state industrial commissioners.⁴⁴ They also expressed a belief that employers should not be allowed to govern unilaterally, a view that is probably in contention between all pro-union workers and anti-union employers, a belief expressed in the suspicion that employers used physical examinations to drive out union supporters.

Unions were not only concerned with physical examinations because of interest in their own organizational well-being. They also held a more expansive sense of right and

⁴⁴ Mitchell was not the only union official to become an industrial commissioner. See for example Ohio Industrial Commissioner Thomas Duffy's speech at the AFL's 1922 convention. Duffy had been a union official, having served as a delegate to earlier AFL conventions himself before taking up his role on the Ohio Industrial Commission. *Report of the Proceedings of the Forty-Second Annual Convention of the American Federation of Labor* (Washington, D.C.: Law Reporter Printing Company, 1922), 311-316.

justice with regard to discrimination, arguing that employment discrimination via medical examinations would harm society and violate the individual freedoms of the examinees. Unions also likely objected to employment discrimination due to ideas about masculinity and social order. Evelyn Nakano Glenn has written that “the concepts of liberal citizenship and free labor developed and evolved in tandem” in the nineteenth century.⁴⁵ Many working class men's sense of belonging to the polity lay in their sense of themselves as laborers. So did their sense of themselves as men. As Glenn writes, “free labor held a pivotal position in the definition of white manhood” in the United States.⁴⁶ Glenn argues that industrialization put pressure on men's identification with and through their work, by changing the labor process. Historian Anna Igra argues that in response to the negative changes in work, working class men increasingly understood work “as the source of a paycheck” rather than their identity. This in turn “made breadwinning more central to normative masculinity.”⁴⁷ With less sense of themselves deriving from the labor they performed, wage earning men got an even larger portion of their sense of themselves from the fact their employment and their role in their families as providers of wages. In this context the increasing threat of job loss would have threatened men’s sense

⁴⁵ Evelyn Nakano Glenn, *Unequal Freedom: How Race and Gender Shaped American Citizenship and Labor* (Cambridge: Harvard University Press, 2002), 2.

⁴⁶ Glenn, *Unequal Freedom*, 58.

⁴⁷ Anna R. Igra, *Wives Without Husbands: Marriage, Desertion, & Welfare in New York, 1900-1935* (Chapel Hill: The University of North Carolina Press, 2007), 47. See also Lawrence B. Glickman, *A Living Wage: American Workers and the Making of Consumer Society* (Ithaca: Cornell University Press, 1997), 37-51. The idea of a man as a breadwinner was important to working class masculinity well before the turn of the twentieth century, however. On this see Jeanne Boydston, *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic* (New York: Oxford University Press 1990), and Ardis Cameron, *Radicals of the Worst Sort: Laboring Women in Lawrence Massachusetts, 1860-1912* (Urbana: University of Illinois Press, 1993), 40-70.

of their identity. In addition, the bodily marks of waged work over time, age and physical impairment, may have meant that a man was a good provider. Physical examinations turned those marks into reasons for discrimination, turning the norms of respectable working class masculinity into conditions unacceptable to employers who distributed access to employment via actuarial rationales. While unions sought to stop this rise of medicalized employment discrimination, they did not succeed.

Meigs Crowder family, 1925.

Grace Meigs Crowder died in 1925, leaving Thomas Crowder to care for their young children, Alice, Juliet, and Thomas Junior.⁴⁸ In the aftermath this loss, Thomas Crowder began writing letters to his father in law addressed “Dear Father,” in which he told small stories of the children and household events. He referred in passing to a “little book about Grace” that he and other extended family members produced.⁴⁹

Crowder typed out a story about his childhood dog, Jack, at his children’s request. “So many, many times you children have asked me to repeat to you my little stories about Jack that I think you must have developed some of my own affection for him. Tommy, at least, when he tells me whom he loves as I say goodnight to him, always includes Jack along with mother and you girls and me. In fact he generally puts Jack at the head of the list and sometimes he ends it there.” Crowder ended the fifteen-page story with Jack passing away when Crowder was eighteen years old. “Grown up as I was the tears ran down my cheeks because of my sorrow, as they do down yours when some favorite thing is lost.”⁵⁰

The children’s aunts told them stories as well. Their Aunt Nina, a famous children’s author and expert on children’s literature named Cornelia Meigs, wrote a

⁴⁸ “Obituary of Thomas Reid Crowder,” *The Pullman News*, July 1942, I have not been able to identify the cause of her death.

⁴⁹ Thomas Crowder to Montgomery Meigs, January 20th, 1931, in Papers of Cornelia Meigs, Rauner Special Collections Library, Dartmouth College, Hanover, NH.

⁵⁰ Thomas Reid Crowder, “To Alice and Doodie and Tommy,” May 6, 1925, 1, 4; in Papers of Cornelia Meigs.

story called "Grace's Wedding," which opened by noting that another aunt had told the children many stories about their mother as a child. The story described Grace Meigs as elated to marry Thomas Crowder. "She was a person transformed, so radiant that there was never anything like it," and the delight of Grace, Thomas, and the extended family with the birth of each of the family's children. The story closed with the time when the children's "dear mother had to go away from us" leaving the children as a gift to the rest of the family "as the part of herself which she could let us keep for all our lives."⁵¹ Cornelia Meigs sent the children copies of her books for children as well. The children maintained a correspondence with their Aunt Nina, thanking her for the books. Some of these letters are typewritten. Alice Crowder wrote in one letter to her aunt, "I am writing this letter in Papa's office. I like to typewrite."⁵²

⁵¹ Cornelia Meigs, "Grace's Wedding," undated, in Papers of Cornelia Meigs, 2-4

⁵² Alice Crowder to Cornelia Meigs, 1929, in Papers of Cornelia Meigs.

“In the dark times
Will there also be singing?
Yes, there will also be singing
About the dark times.”
- Bertolt Brecht, “Motto”¹

Conclusion: Discrimination, Moral Thinning, and Narrative

In his 1901 report on Britain’s workmen’s compensation law, A. Maurice Low pointed out that the law had begun to cause employment discrimination against older and physically impaired employees. Low saw this as “an unfortunate but perhaps unavoidable corollary to the effort made to improve general conditions,” since “bring[ing] about ‘the greatest good for the greatest number’ (...) entails some suffering on the minority.”² From the 1910s through the 1930s, the greater good resulting from injury law reform brought suffering to a minority in the United States. Employers converted people with disabilities from a “statistical minority into a political minority,” in the words of sociologist Claire Liachowitz.³ Employers added more people to the social position of ‘disabled person’ and changed the forms of oppression that went along with that social position.

In conducting medicalized employment discrimination, employers acted like insurers, engaging in risk classification. In risk classification, the guarantors of risk

¹ Bertolt Brecht, “Motto” in John Willett and Ralph Manheim, eds., *Bertolt Brecht: Poems 1913-1956* (New York: Routledge, 1987), 320.

² A. Maurice Low, “The British Workmen’s Compensation Act and its Operation,” *Bulletin of the Department of Labor* vol 6., no. 32 (January, 1901): 103-132; 118. For a longer discussion on Low’s report, see chapter four.

³ Claire H. Liachowitz, *Disability as a Social Construct: Legislative Roots*, 46. See also Liachowitz’s discussion of compensation laws, 45-61.

communities guard the borders of their risk community, selecting some people for admission and others for exclusion in order to keep the community profitable. Insurance scholar Tom Baker calls this a “depooling effect,” and argues that it is part of “the limits of insurance as an engine of social solidarity.”⁴ Because compensation laws created an overlap between belonging to risk communities and employment, risk classification’s depooling effect pushed people out of work.

The stakes were high for those people pushed out of employment. “Starvation,” said industrial physician Frank Pedley in 1931, “is not a satisfactory treatment for the handicapped.” Pullman’s Thomas Crowder agreed with Pedley, saying “[a] job is the thing the handicapped workman needs most.”⁵ Both conveniently overlooked their own roles in writing and implementing the plans that placed job out of reach of many people. Some of the people subjected to employment discrimination no doubt managed to find incomes somehow; the people who actually starved as a result of medical examination simply must have been few. But is it certain that absolutely no one starved as a result? And how many deaths count as ‘few’? How much starvation is a lot of starvation? “[O]nly a small number of people actually have died in this country from starvation,” said a 1931 editorial in *Popular Science* magazine, adding, “but millions are on short

⁴ Baker, “Containing the Promise of Insurance,” 259.

⁵ United States Bureau of Labor Statistics, *Bulletin of the Bureau of Labor Statistics* 536 (1931), 251. For a longer discussion of these quotes, see chapter six.

rations and may continue to do so for some time.”⁶ In 1931, there were twenty reported deaths from starvation in New York.⁷

Whether or not any of the newly unemployed actually starved is not the point. The point instead is to indicate that those excluded from employment were exposed to harm as a result of their exclusion, due to constraints on their access to money and thus to a share of their wants and needs. This is a version of what philosopher Michel Foucault argued was a new pattern in the governance of society that arose in the nineteenth century, a development he called biopolitics. In addition to the state's monopoly of violence, what Foucault called the state's “right to take life or let live,” there arose a new right for those who governed “to make live and to let die.”⁸ ‘Making live’ referred to both the management of public health and population and to the shaping of specific forms of subjectivity – ‘make live’ as in ‘cultivate a specific way of life.’ ‘Letting die’ may be overstated for the twentieth century United States, like Frank Pedley’s reference to starvation, but the heart of the matter is exposure to chance with little protection or security, and with active constriction of options. Those pushed out of employment by employers’ responses to liability law saw their lives worsened and their responses to this worsening were largely private, with few resources made available to them and with their fates being a private issue. The people who got hired or remained employed, would, to paraphrase Foucault, be ‘made to live’ in various ways, as individuals and as a

⁶ “Grain Rots and Men Starve,” *Popular Science*, vol. 119, no. 5 (November, 1931): 70.

⁷ Raymond Richards, *Closing the Door to Destitution: The Shaping of the Social Security Acts of the United States and New Zealand* (University Park: The Pennsylvania University Press, 1994), 76.

⁸ Michel Foucault, *“Society Must Be Defended”: Lectures at the Collège de France, 1975-1976* (New York: Picador, 2003), 241.

population. The people without work would be left to die, or not; the institutions governing injury were relatively indifferent to their fates.

In 1935, in response to the poverty and unemployment widespread in the Great Depression, the U.S. Congress passed the Social Security Act, creating ways people could get money other than through employment. The law attenuated but maintained the link between employment and income, in that social security insurance payments derived in part from labor market performance – higher paid workers would receive higher social security payments – and in that social security only applied to some populations. People with disabilities were not included in the Social Security Act when it was passed and they remained excluded until 1956.⁹ Thus many of the people pushed out of work by employers in response to compensation laws would have been ineligible for Social Security. They remained a population surplus to economic requirements, the possessors of labor power that many employers refused to buy.

This dissertation narrates the operation of “a great and terrible engine” that predictably caught and ground human lives in its “cogs and wheels,” to borrow Frank Norris’s words again.¹⁰ This catching and grinding took many forms, including literal

⁹ Richard Verville, *War, Politics, and Philanthropy: The History of Rehabilitation Medicine* (Lanham: University Press of America, 2009), 143-144. See also Deborah A. Stone, *The Disabled State* (Philadelphia: Temple University Press, 1984), 68-71. Historian Alan Dawley has argued that the Roosevelt administration brought about something “truly new” in 1935, managing via the Social Security Act and similar legislation to reconcile “capitalism and social reform.” Alan Dawley, *Struggles for Justice: Social Responsibility and the Liberal State* (Cambridge: Harvard University Press, 1991), 378. Similarly Roy Lubove called the Social Security Act of 1935 “a revolution in American social welfare.” Roy Lubove, *The Struggle for Social Security, 1900-1935* 2nd ed. (Pittsburg: University of Pittsburgh Press, 1986), 179. The exclusion of people with disabilities does not support these enthusiastic assessments.

¹⁰ Frank Norris, *A Deal in Wheat And Other Stories of the New and Old West* (New York: Doubleday Page, 1903), 25. Norris’s image recurred to me repeatedly as I wrote this dissertation, as did an image from a

harm to people's bodies as well as employment discrimination. The terrible engine changed over time. Some cogs wore out and were replaced; some new parts were added on. Injury law reform and insurance as a worldview re-organized but did not re-purpose this machinery. The catching and grinding continued – innovated but not interrupted.

That is the institutional and political-economic story of this dissertation. The dissertation also tells a cultural story. Employers not only acted like insurers, but also thought and spoke like insurers, taking up insurance as a worldview and a vocabulary.¹¹ Compensation laws institutionalized that worldview in policy, and transported it into employment. As political theorist Nicos Poulantzas has put it, “the body is not simply a biological entity, but a political institution.”¹² With medicalized employment discrimination, employers changed the political institution of the employed body. Employers understood the body not as a political institution, however, but as a market institution. They depoliticized employment discrimination. The people who carried out employment discrimination could say things analogous to Steinbeck's tractor driver, who explained “it's not me” just before he knocked down a home, another cog turning a wheel, and a replaceable one at that. “There's nothing I can do. I'll lose my job if I don't

Walter Benjamin essay, where Benjamin described historical progress as a catastrophe, piling up wreckage into a tower of rubble. Walter Benjamin, “Theses on the Philosophy of History,” in Hannah Arendt, ed., *Illuminations: Essays and Reflections* (New York: Harcourt, 1968), 253-264, 257-258.

¹¹ See François Ewald's discussion of what he called an “insurantal imaginary” which arose in the early twentieth century. François Ewald, “Insurance and Risk in Graham Burchell, Colin Gordon, and Peter Miller, eds., *The Foucault Effect: Studies in Governmentality* (Chicago: University of Chicago Press, 1991), 197-210, 203.

¹² Nicos Poulantzas, *State, Power, Socialism* (London: New Left Books, 1978), 29.

do it.”¹³ In the face of this depoliticization, it matters that unions opposed medical examinations. Even though unions were not able to stop the spread of medicalized employment discrimination, their opposition matters in part because it treated employment discrimination as political and an issue of justice and injustice.¹⁴

In addition to helping create employment discrimination, compensation laws also treated employee injuries as a regrettable but apolitical fact of economic life. Injuries were treated via the abstractions of statistical reason and monetary equivalence, rather than as events with human impact on the lives touched and sometimes ended by injury. Injuries create losses that are non-fungible. These losses fit poorly if at all into a notion of financial compensation. While of course it is better that those who suffer receive money than that they do not, at some fundamental level their losses are uncompensable.¹⁵

Physician, reformer, and social investigator Alice Hamilton gave voice to the

¹³ John Steinbeck, *The Grapes of Wrath* (New York: Penguin, 2006), 38. Original publication, New York: Viking, 1939.

¹⁴ This difference in perspective between unions on the one hand and employers and industrial physicians on the other recalls a remark by the philosopher Carl Schmitt: “Any decision about whether something is unpolitical is always a political decision, irrespective of who decides and what reasons are advanced.” Carl Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty*, translated by George Schwab, (Chicago: University of Chicago Press, 2005), 2. Treating a power relationship as apolitical involves in part the sweeping away of the question of whether or not that relationship is political and helps maintain that power relationship. When something is coded as non-political in this way, there is often pressure to forget its making, to forget that the decision’s status as apolitical was itself historically produced. Ernst Renan, writing in 1882, argued that political institutions depended on forgetting or falsifying the past, arguing that “progress in historical studies often constitutes a danger” for political institutions. Perhaps the difference between political and apolitical is itself a matter of forgetting. As Renan put it, “historical enquiry brings to light deeds of violence which took place at the origin of all political formations, even of those whose consequences have been altogether beneficial.” Ernst Renan, “What is a Nation?” in Homi K. Bhabha, ed., *Nation and Narration* (Abingdon: Routledge, 1990), 8-22; 11.

¹⁵ Barbara Welke has discussed the nonfungible human costs of accidents under the term “owning hazard.” Barbara Young Welke, “The Cowboy Suit Tragedy: Spreading Risk, Owning Hazard in the Modern American Consumer Economy,” *Journal of American History* vol. 1, no. 1 (June, 2014): 97-121, and Barbara Young Welke, “Owning Hazard: A Tragedy,” *UC Irvine Law Review* vol. 1, no. 3 (September, 2011): 693-771.

incompensability of injuries in her memoir reflecting on her involvement in occupational health in the early 20th century. She wrote that “[t]here is something strange in speaking of ‘accident and sickness compensation.’” After all, Hamilton continued, “What could “compensate” anyone for an amputated leg or a paralyzed leg, or even an attack of lead colic, to say nothing of the loss of a husband or son?” Journalist and reform advocate William Hard expressed a similar sentiment in 1910:

For the agony of the crushed arm, for the torment of the scorched body (...) and for the whole hideous host of things like them, following upon the half million accidents that happen to American workmen every year, there can be no compensation. Nor can there be compensation for what follows the telling of the tale by some fellow-workman at the door of his stricken comrade’s home. (...) We cannot translate into dollars and cents the infinite torture, physical and mental, of America’s 500,000 annual industrial accidents.¹⁶

Key aspects of the human experience of injury do not fit within the logic of commodification and risk. We need richly narrated stories of injury and loss but such stories had no place in the insurance-based system of injury law created with workmen’s compensation.

The vignettes between this dissertation’s chapters are a reminder of some of the lives caught in workplace machinery and the machinery of law. If employment discrimination and injury were nothing personal for employers and industrial physicians, the results for the people on the receiving end were deeply personal, as the vignettes

¹⁶ Alice Hamilton, *Exploring the Dangerous Trades: the Autobiography of Alice Hamilton* (Boston: Northeastern Press, 1985), 114. Originally published Alice Hamilton, *Exploring the Dangerous Trades: the Autobiography of Alice Hamilton* (Boston: Little, Brown, 1943). While this work was published in 1943, it reflects Hamilton’s experiences of several decades in occupational health and safety work. William Hard, *Injured in the Course of Duty* (New York: Ridgway Company, 1910), 38.

dramatize.¹⁷ The vignettes serve another purpose as well. This dissertation narrates both employment discrimination and the ongoing creation of injury as having a kind of inexorability, as predictable outcomes arising from the terrible engine of early 20th century U.S. capitalism. At the same time, for the people harmed by them, these events produced disorder and uncertainty, as the vignettes help illustrate. The vignettes also represent some of the human experiences of injury that did not fit with compensation laws. Of course, these stories were told in specific contexts for specific purposes. Nettie Blom and Frank Wendler told stories about their injuries in the attempt to win injury compensation. While trapped in the Cherry mine, Samuel Howard wrote in his diary in order to record the fact of his life, and in the attempt to ward off thinking too much about his situation. William Hard, Upton Sinclair, and Jack London told stories to accomplish political goals. While trapped underground Walter Waite told stories, one about food to tease his co-workers, one about how he and his co-workers would escape if they only held on, and after his rescue he told stories of his underground storytelling. Thomas Crowder grieved for the loss of his wife, Grace Meigs Crowder, and helped parent his children through their loss, by telling the children stories and facilitating a relationship between the children and their storytelling aunts.

These stories were shaped by the setting where they were told and by their tellers' goals. Blom's purpose was to win her lawsuit; Crowder's was to grieve, and to parent his children. These differences matter. At the same time, while the goals of these stories

¹⁷ For a thought-provoking work on a specific historical incident and on the importance of narrative as dramatization, see Barbara Young Welke, "Owning Hazard: A Tragedy," *UC Irvine Law Review* vol. 1, no. 3 (September, 2011): 693-771.

varied, their presence as stories marks a similarity. While there were a great many limits to the court-based system of employee injury law, that system was one of adversarial presentation of truth claims, or at least of injury narratives. Legal actors presented stories about injuries, stories that figured the other party in the dispute as a character. Plaintiffs' claims presented injured employees as blameless victims deserving compensation because of the financial and non-financial costs of their injuries. Defendants presented themselves as faultless, or at least faultless enough, and as not deserving to pay for those injuries. The process of contention between those narratives resulted in a decision about the officially accepted narrative. This story was not necessarily true. "Truth suffers in law," as Barbara Welke has put it, in part because of the ways legal process requires a particular "narrative form into which an event must be translated in order to state a legal claim."¹⁸ Still, the proceedings at least contained fragments of the experiential truths of injury, and the stakes of this contest of stories was an explicitly moral and political one. The point is not to celebrate the institutions that produced these stories, but to show a kind of narrative and experiential plurality that highlights the moral thinning of injury after compensation laws. In the court-based system of injury law at least the question could be posed, was this injury a wrong? There was no more space for that question or

¹⁸ Welke, *Recasting American Liberty*, 244, 235. Barbara Young Welke, *Recasting American Liberty: Gender, Race, Law, and the Railroad Revolution, 1865-1920* (New York and Cambridge: Cambridge University Press, 2001). Welke's "Owning Hazard" and "The Cowboy Suity Tragedy" are important reminders of the limits of the court-based system of product liability law, and those criticisms extend to the court-based system of employee injury law. For a reflection on the ways legal storytelling interacts with other practices of storytelling, see Natalie Zemon Davis, *Fiction in the Archives: Pardon Tales and Their Tellers in Sixteenth-century France* (Stanford: Stanford University Press, 1987).

for the stories of injury and its effects under the insurance-based system of injury law brought about by workmen's compensation.

As the vignettes about Thomas Crowder and Walter Waite illustrate, during and after times of suffering, people often narrate their experiences. In his essay "A Place for Stories," historian William Cronon argues that stories are central to the writing of history and to human social life. Storytelling is the "necessary core" of history writing.¹⁹ Narrative "is fundamental to the way we humans organize our experience."²⁰ Stories are intrinsically moral, in Cronon's view, such that they presume and reflect values. They are also a key genre for moral reflection: "narratives remain our chief moral compass in the world."²¹

Whether or not this is universal, it is clearly an important human need and practice in American culture, and yet over time the institutions that governed employee injury became increasingly non-narrative based. The philosopher Richard Rorty argues that moral improvements in society generally result from "hearing sad and sentimental stories" because such stories make audiences care about the people whose suffering is

¹⁹ William Cronon, "A Place for Stories: Nature, History, and Narrative," *Journal of American History* vol. 78, no. 4 (March, 1992): 1347-1376, 1349.

²⁰ Cronon, "A Place for Stories," 1368. The moral philosopher Alasdair MacIntyre would agree, arguing that human life is fundamentally narrative in character, which is to say that a non-narrative description of human life or lives leaves out everything important about people. To put it another way, for MacIntyre, human life is only comprehensible as such through narrative. A non-narrative life would not be recognizable as human life. See Alasdair MacIntyre, *After Virtue: A Study in Moral Theory* (Notre Dame: University of Notre Dame Press, 1981), 204-225.

²¹ Cronon, "A Place for Stories," 1375. This means as well that for Cronon history is always a moral discipline, a discipline where morality is inextricably bound up with what historians do. History has a "its moral center," one derived from the role of narrative in the discipline. Cronon, "A Place for Stories," 1370.

narrated.²² As Cronon writes, “storytelling helps keep us morally engaged with the world.”²³ To tell a story about someone is to take and to advocate for a kind of moral orientation toward that person. A decline in story telling, then, is a decline in moral deliberation. As stories about injuries became drained out of injury law, the emotional life of injury experiences increasingly disappeared from the institutions governing employee injury. The institutions of injury law became less morally engaged, at least in terms of the experiential content of the law, with the problem of injury. There was no longer, to use Cronon’s essay title, “A Place for Stories” within injury law, or certainly there was less of a place. There is a kind of inhumanity to this.

In Thomas Crowder’s case, humane and inhumane overlap. Crowder’s office was a place of great humanity as he helped his children type stories to their writer aunt and where he typed stories for his children. Yet his office was also the place where Crowder served as both author and object of the logic of risk, in its facets as discrimination and as a thinning out of the moral vocabularies of injury. Over the course of his life Crowder increasingly dealt in the abstractions of medical statistics, examination forms, and hiring policies while he also cared for his children, typed stories for them, and helped them type stories for their aunt and grandfather. The point is not that Crowder was a villain. He was the individual instrument of institutional pressures and decisions much larger than himself. Few people if any would have acted differently in his place; it is the place and

²² Richard Rorty, *Truth and Progress: Philosophical Papers, Volume Three* (Cambridge: Cambridge University Press, 1998), 172. This is why, for Rorty, “novels rather than moral treatises are the most useful vehicles of moral education.” Rorty, *Truth and Progress*, 12.

²³ Cronon, “A Place for Stories,” 1375.

not the person that this dissertation criticizes. This co-existence of great humanity and increasing dehumanization within the same social space, with the same person as its actor, exemplifies much about the kind of social relations typified by commodification and intensified by insurance- and risk-based forms thereof.²⁴ Clearly the Crowder family, like Walter Waite, needed stories at some deep and personal level. The logic of risk that Crowder lived out and helped enact in his professional life, and more broadly, the commodification of social relationships, makes narrative an important collective and political activity as well.

Employee injuries and their depoliticization remain a contemporary problem. According to the U.S. Bureau of Labor Statistics, there were 4,693 fatal workplace accidents in 2011, the most recent year for which data is available. In one sense then, relatively few people die in workplace accidents in the 21st century United States. And yet, how did it come to be that 4,693 deaths count as relatively few? That number means that on average one person died in the United States as part of employment approximately every two hours in 2011. Go see a film; when it ends, someone has died in an employee accident. The number of employment fatalities in 2011 is higher than the number of victims of the terrorist attacks of September 11th, 2001, and almost as high as

²⁴ As discussed in the introduction, this dissertation is both an account of specific historical changes and a kind of synecdoche for the sorts of injustices woven into the fabric of and regularly produced by capitalist society. As E.P. Thompson put it, in capitalism there is a pervasive “tendency to reduce all human relationships to economic definitions.” E.P. Thompson, “The Peculiarities of the English,” *Socialist Register*, vol. 2 (1965): 311-362, 356. Thompson argued that “[t]he injury which advanced industrial capitalism did, and which the market society did, was to define human relations as being primarily economic.” He considered this definition of humanity “as ‘economic’ at all” itself a kind of injury and a form of inhumanity. Michael Merrill and E.P. Thompson, “An Interview with E.P. Thompson,” *Radical History Review* vol.3, no. 12 (1976): 4-25, 24.

the 4,474 U.S. military personnel killed in Iraq from 2003 to 2013. Between 2003 and 2011 there were a total of 47,718 reported fatal employee accidents.²⁵ That number is over ten times the U.S. military fatalities in Iraq.²⁶ There is something uncomfortable in these statistical comparisons, and there should be. The notion of the comparability of deaths ought to make us uneasy, as should the monetary comparison involved in insurance-based measurements of the value of life, that some lives are worth more than others. The point is not to make claims about which is worse, employment or terrorism, but to point out that when a number of people are killed, the manner in which they were killed does a great deal to determine whether that number appear as relatively few or as a

²⁵ United States Bureau of Labor Statistics, "Census of Fatal Occupational Injuries (CFOI) - Current and Revised Data," Online, Internet, <http://www.bls.gov/iif/oshcfoi1.htm> Accessed April 3, 2014. Injury is frequent. The BLS reports as well that there were over ten million workplace injuries that required time off work from 2003 through 2011. United States Bureau of Labor Statistics, "Occupational injuries and illnesses: industry data," Online, Internet, <http://data.bls.gov/timeseries/IIU00000000063100> Accessed April 3, 2014. There were just over 900,000 such injuries recorded in the United States in 2011. There were 239,618,000 wage earners in 2011. United States Bureau of Labor Statistics, "Labor Force Characteristics by Race and Ethnicity, 2011," Table 1, Online, Internet, <http://www.bls.gov/cps/cpsrace2011.pdf> Accessed April 3, 2014. At that injury rate approximately four percent of wage earners suffered an injury involving time away from work in a ten year period: one wage earner in twenty five. Over a thirty year period, the figure rises to just over ten percent of wage earners.

²⁶ "Faces of the Fallen," *The Washington Post*, Online, Internet <http://apps.washingtonpost.com/national/fallen/> Accessed April 3, 2014. This count does not include Iraqi casualties, about which see Iraq Body Count, Online, Internet, <http://www.iraqbodycount.org/> Accessed April 5, 2014. Similarly the count of employment-related fatalities in the United States does not count all the employment-related fatalities directly related to the U.S. economy, such as injuries at facilities owned by U.S. companies but operated in other countries. Over all, the International Labour Organization estimates that there are two million employment-derived fatalities annually in the global economy. International Labour Organization, *Safety in Numbers: Pointers for a Global Safety Culture at Work* (Geneva: International Labour Organization, 2003), 1. This means 5,000 such fatalities each day. International Labour Organization, "Work-related fatalities reach 2 million annually," Online, Internet, http://www.ilo.org/global/about-the-ilo/media-centre/press-releases/WCMS_007789/lang--en/index.htm Accessed April 14, 2014.

great many.²⁷ Why is employment the kind of social practice where the numbers of the dead are easy to think of as relatively few?

The answer is due in part to the rise of treating employee injuries and deaths as natural and normal in the early twentieth century, and treating those human losses through statistical and insurance-based perspectives, what this dissertation has called morally thin vocabularies. Compare employee injury with murder. Both are social problems and some might say that both will always be present in society such that a society without employee injuries and without murder is an impossible utopia. Yet the two are quite different in that murder is a kind of wrong in a way that employee injury is not. Murder is a morally rich term implying a narrative, a murderer and a victim, while injury is a much more morally thin term. The point can be illustrated by a remark from a Bureau of Labor Statistics report, which noted that there were 5,915 people killed in employee accidents in 2001. The report added in a footnote that “[t]otals for 2001 exclude fatalities resulting from the September 11 terrorist attacks.” There is something disconcerting in the colorless terminology “fatalities resulting from” when juxtaposed to

²⁷ We can see this difference operating in a pair of recent terrible events. Political scientist Peter Dreier and policy analyst Donald Cohen have pointed out the tremendous difference in the public and legal response to the explosions at the Boston Marathon and at the West Texas Fertilizer Company, which occurred within two days of each other in April of 2013. The first injured more people; the second killed more people. The first was a terrorist attack, a crime and an atrocity. The second was largely ignored, after the end of initial concern that it too was the result of a terrorist attack. Peter Dreier and Donald Cohen, “The Texas Fertilizer Explosion Cries Out for Justice,” *The Progressive*, June 02, 2013, Online, Internet, <http://www.progressive.org/texas-fertilizer-explosion-cries-out-for-justice> accessed May 10th, 2014. For a similar argument, emphasizing the decline of media attention to occupational health and safety, see also Mike Elk, “The Texas Fertilizer Plant Explosion Cannot be Forgotten,” *The Washington Post*, April 23, 2013, Online, Internet, http://www.washingtonpost.com/opinions/mike-elk-the-texas-fertilizer-plant-explosion-cannot-be-forgotten/2013/04/23/48eb770c-ac26-11e2-b6fd-ba6f5f26d70e_story.html accessed May 10th, 2014.

“the September 11 terrorist attacks.”²⁸ It is more common to talk about terrorist acts as having victims, a morally charged term. Yet this kind of emotionally distant language feels far less disconcerting when applied to employee injuries: fatalities resulting from employment-related accidents.

As I have written this dissertation I have come to suspect that workplace injury is today both very common and yet largely unremarked upon in working class life in the United States. It was not until several years into this project that I realized I had never really thought about employee injury as part of my family history and that we had never really talked about this. Both of my parents, my brothers, my partner, several of my grandparents, and I have all been injured at jobs. The unremarkable nature of injury is both a cause and an effect of the perception that there are relatively few employee injuries. Important aspects of the depoliticization and obfuscation of employee injury lies outside the temporal scope of this dissertation and but the foundation was laid in the early 20th century.

In addition to the rise of employment discrimination, then, this dissertation is about the depoliticization of workplace injury and the decline in narratives of injury. Workplace injuries should be re-politicized. One step in that re-politicization of injury would be narrating injuries, their effects, and the broad range of the human meanings of injuries that have no place within existing institutions. Perhaps one result of that re-politicization, if institutionalized, ought to be that employers should be required to hear

²⁸ United States Bureau of Labor Statistics, “1992-2002 Census of Fatal Occupational Injuries” in “Census of Fatal Occupational Injuries (CFOI) - Current and Revised Data,” Online, Internet, <http://www.bls.gov/iif/oshcfoi1.htm>, Accessed April 3, 2014.

the stories of their employees' injuries and their effects, as told by anyone touched by these injuries. Such a telling would involve narrating the full costs of injury in an expansive sense of 'cost' that goes beyond monetary while also setting those costs in the context of low pay and the low value of human life in injury law. Of course, the continued existence of at-will employment would provide significant obstacles to this kind of narration: employees who create unpleasant consequences for their employers risk their employment and sometimes their employability. Ultimately politicizing employee injury requires politicizing employment.

Discussing injury in morally thin terms means that employers are sheltered from hearing injury stories. The various advantages that the powerful have insulate them from the effects of their decisions in a variety of ways, some of which make it easier for them to live with themselves. It is not enough, however, to promote, "hearing sad and sentimental stories," in Rorty's terms. Rather, we should discuss whether and when injuries are not only *sad* but *wrong*. A remark by Walter Benjamin is provocative and resonant here: "Only that historian will have the gift of fanning the spark of hope in the past who is firmly convinced that even the dead will not be safe from the enemy if he wins. And this enemy has not ceased to be victorious."²⁹ Lack of stories about workplace

²⁹ Walter Benjamin, "Theses on the Philosophy of History," in Hannah Arendt, ed., *Illuminations: Essays and Reflections* (New York: Harcourt, 1968), 253-264, 255. The historian of slavery Walter Johnson makes a similar point, arguing against narratives of progress that establish "a closed circuit by which historians and their audience together share in the knowledge that they have transcended the past." This representation of history figures the present as "washed clean of the sins of the past (rather than doggedly implicated in them)." Walter Johnson, "On Agency," *Journal of Social History* vol. 37, no. 1 (Autumn, 2003): 113-124; 120-121.

injury should number among both the causes and the effects of the ways in which many of the dead are not safe. And many of the living.

At least part of the danger to the dead is the danger of their being forgotten, and their deaths being rendered apolitical if regrettable incidents on the road of human progress. The introduction of market-based forms of social security provision produced new exclusion for sections of the population, as well as new pressures to forget or ignore the human consequences of injury. Other social institutions might be able to treat a broader set of those consequences without creating exclusion, institutions with more space for narrative and for human meanings that do not fit neatly into the logic of monetary equivalence. These institutions would require vocabularies much more morally robust than that of the insurance worldview that came to govern employee injury and access to employment in the early twentieth century, and would probably require breaking with the social logic of commodification altogether. In the words of Steinbeck's farmer: "We all got to figure. There's some way to stop this. It's not like lightning or earthquakes. We've got a bad thing made by men, and by God that's something we can change."³⁰

³⁰ Steinbeck, *Grapes of Wrath*, (New York: Penguin, 2006), 38. Original publication, New York: Viking, 1939.

Bibliography

Manuscript Collections

Hagley Museum and Library, Wilmington, Delaware
National Association of Manufacturers Records
National Industrial Conference Board Records

Newberry Library, Chicago, Illinois
Pullman Company Records

Rauner Special Collections Library, Dartmouth College, Hanover, New Hampshire
Cornelia Meigs Papers

State Historical Society of Iowa, Des Moines, Iowa
Multiple Governors Correspondence

University of Minnesota Law Library
State Supreme of Minnesota Trial Records

Western Reserve Historical Society, Cleveland, Ohio
The Joseph and Feiss Company Records

Wisconsin Historical Society, Madison, Wisconsin
Wisconsin Industrial Commission, Workmen's Compensation Division Records

Newspapers and Magazines

The American Underwriter Magazine and Insurance Review
The Black Diamond
Brotherhood of Locomotive Firemen and Enginemen's Magazine
Bulletin of the Bureau of Labor Statistics
The Bulletin of the General Contractors Association
Chicago Daily News
Cigar Makers Journal
Coal Age
Correctionville News
The Fuel Magazine
Human Engineering
The Indicator
Industrial Medicine
Industrial Pioneer

Insurance Monitor
International Molders' Journal
Locomotive Firemen and Enginemen's Magazine
Los Angeles Times
The Lowell Sun
Machinists Monthly Journal
McClure's Magazine
Mining and Scientific Press
Monthly Labor Review
The National Compensation Journal
New York Times
Plumbers', Gas and Steam Fitters' Journal
The Outlook
The Painter and Decorator
The Perry Daily Chief
Popular Science
The Progressive
The Public
The Pullman News
Railway Age Gazette
Socialist Review
The Spectator
The Standard
Sullivan County Democrat
Sullivan Daily Times
Sullivan Union
The Survey
The Washington Post
The Week
The Weekly Underwriter
Women's Medical Journal

Legal Cases

Abel v. Hardwood Mfg. Co., 120 N.W. 359 (1909).
Bark v. Dixon, 131 N.W. 1078, 115 Minn. 172, Ann. Cas.1912D, 775 (1911).
Blom v. Yellowstone Park Association, 86 Minn. 237 (1902).
Carlin v. Kennedy, 97 Minn. 141 (1906).
Central Railroad v. Richards, 62 Ga. 306 (1879).
Dally v. Auxer, 122 N.W. 1135 (1909).
Fitzgerald v. International Flax Twine Co., 116 N.W. 475 (1908).
Frank Wendler v. Red Wing Gas & Electric Company, 92 Minn. 122 (1904).
Gloekner v. Hardwood Mfg. Co., 122 N.W. 465 (1909).

Goodhart v. Pennsylvania R.R. Co., 177 Pa. 1, 55 Am. St. Rep. 705 (1896).
Graseth v. Northwestern Knitting Co., 128 Minn. 245 (1915).
Jennings v. Mason City Sewer Pipe Co., 174 NW 785 (1919).
Jensen v. Regan, 99 N.W. 1126 (1904).
Lawson v. Suwanee Fruit and Steamship Co., 336 U.S. 198 (1949).
Ludwig v. Spicer, 109 N.W. 832 (1906).
Maki v. St. Luke's, 122 Minn. 444 (1913).
Mary Lee Coal Railway Co. v. Chambliss, 97 Ala. 171 (1893).
McFadden v. St. Paul Company, 263 Ill. 441; 105 N.E. 314 (1914).
McInerny v. St. Luke's, 141 N.W. 837 (1913).
McVay v. Mannheimer Bros., 129 N.W. 371 (1911).
Mortenson v. Hotel Nicollet Co., 136 N.W. 306 (1912).
National Biscuit Co. v. Nolan, 138 F. 6 (1905).
Nease v. Hughes Stone, 114 Okla. 170 (1925).
Pappas v. N. Iowa Brick & Tile Co., 206 N.W. 146 (1925).
Payne v. The Western & Atlantic Railroad, Co., 81 Tenn. 507 (1884).
Raasch v. Elite Laundry Co., 108 N.W. 477 (1906).
Schwab v. Emporium Forestry, 153 N.Y. Supp. 234 (1915).
State ex rel. Garwin v. District Court of Cass County, 151 N.W. 910 (1915).
State Industrial Commission v. Newman et al., 118 N.E. 794 (1918).
Steinbrunner v. Railway Co., 146 Pa. 504 (1892).
Thiel v. Kennedy, 84 N.W. 657 (1901).
Thompson v. Great Northern Ry. Co., 82 N.W. 637 (1900).
Vicksburg and Meridian Railroad Company v. Putnam, 118 U.S. 545 (1886).
Weaver v. Maxwell Motor Co., 152 N.W. 993 (1915).

Published Primary Sources

Alexander, E.D. "Suggestions to those Contemplating Self-Insurance." *National Compensation Journal* 1, no.4 (April 1914): 8-9.

American Federation of Labor. *Report of the Proceedings of the Thirty-Fourth Annual Convention of the American Federation of Labor Held at Philadelphia, Pennsylvania, November 9 to 21*. Washington, D.C.: Law Reporter Printing, 1914.

———. *Report of the Proceedings of the Forty-Second Annual Convention of the American Federation of Labor*. Washington, D.C.: Law Reporter Printing Company, 1922.

Armstrong, Barbara. *Insuring the Essentials*. New York: MacMillan, 1932.

- Bagehot, Walter. *Economic Studies*. London: Longman, Green and Co., 1888.
- Black, Henry Campbell. *A Law Dictionary Containing Definitions of the Terms and Phrases of American and English Jurisprudence, Ancient and Modern*. St. Paul: West Publishing Company, 1910.
- Bouvier, John. *A Law Dictionary: adapted to the Constitution and laws of the United States of America and of the Several States of the American Union With References to the Civil and Other Systems of Foreign Law, Volume 1*. Philadelphia: J.B. Lippincott Company, 1892.
- Boyd, James Harrington. *Workmen's Compensation and Industrial Insurance Under Modern Condition*. Indianapolis: The Bobbs-Merrill Company, 1913.
- . *Workmen's Compensation, or Insurance Against Loss of Wages Arising Out of Industrial Accidents*. Columbus: The F. J. Heer Printing Co., 1911.
- Bulletin of the Industrial Commission of Ohio* 2, no. 1. Columbus: F.J. Heer Printing Co., 1915.
- Bureau of Mines, Mining and Mine Inspection of the State of Missouri for the Year Ending December 31, 1909*. Jefferson City: The Hugh Stephens Printing Company, 1910.
- Callender, Harold. "Copper is King: Facts About the Bisbee Deportation." *United Mine Workers Journal* 28 no.18 (August 30, 1917): 9.
- Clark, W. Irving. *Health Service in Industry*. New York: MacMillan, 1922.
- Commission on Occupational Diseases, *Report of Commission on Occupational Diseases to His Excellency Governor Charles S. Deneen*. Chicago: Warner Printing Company, 1911.
- Committee on Factories of the Chicago Tuberculosis Institute, *A Plan of Examination of Employees for Tuberculosis*. Chicago: Committee on Factories of the Chicago Tuberculosis Institute, 1912.
- Commons, John R. *Myself: The Autobiography of John R. Commons*. New York: MacMillan, 1934.
- . *The Distribution of Wealth*. New York: The Macmillan Company, 1893.

- Crowder, Thomas R. "A Study of the Ventilation of Sleeping Cars." *Journal of the American Public Health Association* 1, no. 12 (December, 1911): 920-92.
- DePauw University, *Alumnal Record*. Greencastle: Depauw University, 1915.
- Downey, E.H. *History of Labor Legislation in Iowa*. Iowa City: State Historical Society of Iowa, 1910.
- Eastman, Crystal. "The Three Essentials for Accident Prevention," *Annals of the American Academy of Political and Social Science* 38 (June 1911): 99
- . *Work Accidents and the Law*. New York: Russell Sage Foundation, 1910.
- Ely, Richard. *An Introduction to Political Economy*. New York: Hunt & Eaton, 1893.
- . *Socialism: An Examination of its Nature, its Strength, and its Weakness, with Suggestions for Social Reform*. New York: Thomas Y. Crowell & Company, 1894.
- Emmons, Arthur B. "Health in Mercantile Establishments II. Medical Records," *The Journal of Industrial Hygiene*, vol. 2, no. 8 (December 1920): 279-285
- "Eye Conservation Through Compulsory Use of Goggles in Workshops," *Bulletin of the United States Bureau of Labor Statistics* 491. Washington D.C.: Government Printing Office, 1929.
- Factory Investigating Commission, *Second Report of the Factory Investigating Commission, Volume 2*. Albany: J.B. Lyon, 1913.
- Farrington, F. "Oppose Physical Examination of Workers," *United Mine Workers Journal* 28, no.16 (August 16, 1917): 7.
- Fischer, Martin. *Martin B. Wherry: Bacteriologist*. Springfield: Thomas, 1938.
- Flexner, Abraham. *Medical Education in the United States and Canada*. New York: Carnegie Foundation, 1910.
- Frankel, Lee K., Alexander Fleisher, and Laura Seymour, *The Human Factor in Industry*. New York: MacMillan, 1920.
- Freund, Ernst. *The Police Power, Public Policy and Constitutional Rights*. Chicago: University of Chicago Press, 1904.

- Funk, A.B., Industrial Commissioner of Iowa. *Report of the Workmen's Compensation Service for the Biennial Period Ending June 30, 1918*. Des Moines: State of Iowa, 1918.
- Garst, Warren, Industrial Commissioner of Iowa. *First Biennial Report of the Iowa Industrial Commissioner to the Governor of the State of Iowa for the Period Ending June 30, 1914* (Des Moines: State of Iowa, 1914)
- Hamilton, Alice. *Exploring the Dangerous Trades: the Autobiography of Alice Hamilton*. Boston: Northeastern Press, 1985.
- . "Occupational Disease Clinic of New York City Health Department," *Monthly Review of Labor Statistics* 1, no.5 (November 1915): 7-19
- Hard, William. *Injured in the Course of Duty*. New York: Ridgway Company, 1910.
- Harper, Samuel. *The Law of Workmen's Compensation: The Workmen's Compensation Act with Discussion and Annotations, Tables and Forms*. Chicago: Callaghan and Company, 1920.
- Harrar, James. "How a Large Department Store Conserves the Health of Its Workpeople," *Safety: Bulletin of the American Museum of Safety* 3, no.3 (March 1915): 67-71.
- Health Insurance Commission of the State of Illinois, *Report of the Health Insurance Commission of the State of Illinois*. Springfield: Illinois State Journal Co., 1919.
- Hearings Before the Committee on the Judiciary on Employers' Liability and Workmen's Compensation*. Washington, D.C.: Government Printing Office, 1912.
- Hearings Before the Employers' Liability and Workmen's Compensation Commission, Part 3*. Washington, D.C.: Government Printing Office, 1911.
- Henderson, Charles. *Compensation or Insurance versus Employers' Liability: Address at the Sixteenth Annual Meeting of the Central Supply Association*. N.P.: 1910.
- Holland, Rupert Sargent. "The Rights of an Employee Against Employers' Blacklists," *The American Law Register* 51, no. 12 (December 1903): 803-809.
- Holmes, Oliver Wendell, Jr. "The Path of the Law," In *The Path of the Law and its*

Influence: The Legacy of Oliver Wendell Holmes, Jr., edited by Steven J. Burton, 333-351. Cambridge: Cambridge University Press, 2000.

Holmes, Oliver Wendell, Jr. *The Common Law*. Boston: Little, Brown, and Company, 1881.

Hookstadt, Carl. "Comparison of Workmen's Compensation Insurance and Administration," *Bulletin of the United States Bureau of Labor Statistics* 301. Washington D.C.: Government Printing Office, 1922.

Hugh V. Mercer, *Workmen's Compensation* (n.p., n.d.)

Illinois Bureau of Labor Statistics, State Board of Commissioners of Labor, *Report of the Cherry Mine Disaster*. Springfield: State Printer, 1910.

Industrial Commission of Colorado. *First Report of the Industrial Commission of Colorado*. Denver: Industrial Commission, 1917.

———. *Second Report of the Industrial Commission of Colorado*. Denver: Industrial Commission, 1918.

———. *Fifth Annual Report*. Denver: Industrial Commission, 1920.

Industrial Workers of the World. *Proceedings of the First Convention of the Industrial Workers of the World*. New York: New York Labor News, 1905. Reprinted by Merit Publishers, New York, 1969.

Insurance Federation of Iowa. *Shall the State of Iowa Experiment with so-called "State" Insurance?* Des Moines: N.P., 1914.

International Labour Organization, *Safety in Numbers: Pointers for a Global Safety Culture at Work*. Geneva: International Labour Organization, 2003.

"Iowa Confronted by Problem of the One Eyed Workman," *National Compensation Journal* 1, no.8 (August 1914): 3-4.

Iowa Employers' Liability Commission, *Report of Employers' Liability Commission*. Des Moines: Emory H. English, State Printer, 1912.

Jevons, William Stanley. *The Principles of Economics: A Fragment of a Treatise on the Industrial Mechanism of Society*. London: MacMillan and Co., Limited, 1905.

- Jones, F. Roberston. *Digest of Workmen's Compensation Laws in the United States and Territories, with Annotations*. New York: F. Roberston Jones, 1921.
- Journal of the 45th General Assembly of the State of Illinois*. Springfield: Phillips Bros., 1908.
- Journal of the Senate of the General Assembly, Volume 46*. Springfield: Illinois State Journal Co., 1911.
- Journals of the Senate and House of Representatives: Special Session of the 46th General Assembly of the State of Illinois*. Springfield: State of Illinois, 1910.
- Knight, Augustus S. *The Value of Periodic Examinations of Life Insurance Policyholders*. New York: Metropolitan Life Insurance Company, n.d.
- Knopf, S. Adolphus. *A History of the National Tuberculosis Association: The Anti-Tuberculosis Movement in the United States*. New York: National Tuberculosis Association, 1922.
- Kober, G.M. and E.R. Hayhurst, *Industrial Health*. Philadelphia: P. Blakiston's Son and Company, 1924.
- Labor Legislation Enacted by the Forty-Seventh General Assembly of Illinois*. Springfield: Illinois State Journal Co., 1911.
- Legge, Robert. "Industrial Medicine." *California State Journal of Medicine* 19, no. 2 (February 1921): 64-68.
- Liberatore, Matteo. *Principles of Political Economy*. New York: Benziger and Co., 1891.
- London, Jack. *War of the Classes*. New York: Macmillan, 1905.
- Low, A. Maurice, "The British Workmen's Compensation Act and its Operation," *Bulletin of the Department of Labor* 6, no. 32 (January 1901): 103-132.
- Marshall, Alfred. *Principles of Economics, Volume I*. London: MacMillan and Co., Limited, 1898.
- Massachusetts Industrial Accident Board, *First Annual Report*. Boston: Wright and Potter Printing Co., State Printers, 1914.

- Mitchell, John. "Operation of the New York Workmen's Compensation Law," *American Labor Legislation Review* 5, no. 1 (1915): 15-30.
- Mock, Harry E. "Industrial Medicine and Surgery: The New Specialty." In *Transactions of Section on Preventive Medicine and Public Health of the American Medical Association at the Sixty-Seventh Annual Session*, 64-76. Chicago: American Medical Association Press, 1916.
- . *Industrial Medicine and Surgery*. Philadelphia: W.B. Saunders and Company, 1919.
- National Industrial Conference Board. *Health Service in Industry: Research Report Number 24, January, 1921*. New York: National Industrial Conference Board, 1921.
- . *Medical Care of Industrial Workers*. New York: National Industrial Conference Board, 1926.
- . *The Physician In Industry: A Symposium*. New York: National Industrial Conference Board, 1922
- Nebraska Department of Labor. *Second Biennial Report: Department of Compensation, 1917-1918*. Lincoln: Department of Labor, 1918.
- Pound, Roscoe. "Individual Interests in the Domestic Relations." *Michigan Law Review*, 14, no. 3 (January 1916): 177-196.
- Preliminary Report of the Factory Investigating Commission*. Albany: Argus, 1912.
- Price, George Moses. *The Modern Factory: Safety, Sanitation and Welfare*. New York: John Wiley & Sons, 1914.
- Proceedings: Third National Conference, Workmen's Compensation for Industrial Accidents, Chicago, June 10-11, 1910*. Princeton: Princeton University Press, n.d.
- "Proceedings of the Conference on Social Insurance Called by the International Association of Industrial Accident Boards and Commissions." *Bulletin of the United States Bureau of Labor Statistics* 212. Washington D.C.: Government Printing Office, 1917.
- Proceedings of the Sixth Annual Convention of the Association of Governmental Labor*

Officials of the United States and Canada. Washington: Government Printing Office, 1920.

Public Documents of the State of Connecticut, Volume 1 Part 2. Hartford: State of Connecticut, 1911.

Rauschenbusch, Walter. *Christianizing the Social Order.* New York: The Macmillan Company, 1914.

Rector, F.L. "Physical Examinations in Industry," *Monthly Labor Review* (April 1926): 18-23.

———. "Physical Examination of Industrial Workers: Results of an Investigation by the Conference Board of Physicians in Industry." *The Journal of the American Medical Association* 75, no. 25, (December 1920): 1739-1741.

Reeves, Edith. *Care and Education of Crippled Children in the United States.* New York: Survey Associates, 1914.

Reno, Conrad. *A Treatise On the Law of the Employers' Liability Acts of New York, Massachusetts, Indiana, Alabama, Colorado, and England.* Indianapolis: Bowen-Merrill Company, 1903.

Report of Atlantic City Conference on Workmen's Compensation Acts, July 1909. n.p., 1909.

Report of the Employers' Liability Commission of the State of Illinois. Chicago: Stromberg, Allen, & Co., n.d.

Richardson, Dorothy. *The Long Day: The Story of a New York Working Girl.* Charlottesville: University Press of Virginia, 1990.

Rubinow, Isaac. *Social Insurance: With Special Reference to American Conditions.* New York: Holt, 1913.

———. *Standards of Health Insurance.* New York: H. Holt and Company, 1916.

Ryan, Harwood E. "Methods of Insuring Workmen's Compensation." *Annals of the American Academy of Political and Social Science* 70, no. 15 (March 1917): 244-254.

Schneider, William R. *The Law of Workmen's Compensation: Rules of Procedure,*

Tables, Forms, Synopses of Acts, Vol. II. St. Louis: Thomas Law Book Company, 1922.

Second Special Report of the Bureau of Labor Statistics: Labor Laws of the State of California. Sacramento: Superintendent of State Printing, 1911.

Selby, Clarence. "Industrial Medical Service." In *Industrial Health* edited by George Kober and Emery Hayhurst, 114-135. Philadelphia: P. Blakiston's Son and Company, 1924.

———. *Studies of the Medical and Surgical Care of Industrial Workers.* Washington, D.C.: Government Printing Office, 1919.

Sinclair, Upton. *The Jungle.* New York: Doubleday, Page & Company, 1906.

State of Illinois, Board of Administration, *Fourth Annual Report.* Springfield: Illinois State Journal Co., State Printers, 1915.

United States Bureau of Labor Statistics. "Census of Fatal Occupational Injuries (CFOI) - Current and Revised Data." Online, Internet, <http://www.bls.gov/iif/oshcfoi1.htm> Accessed April 3, 2014.

———. "Labor Force Characteristics by Race and Ethnicity, 2011," Table 1, Online, Internet, <http://www.bls.gov/cps/cpsrace2011.pdf> Accessed April 3, 2014.

———. "Occupational injuries and illnesses: industry data," Online, Internet, <http://data.bls.gov/timeseries/IU00000000063100> Accessed April 3, 2014.

———. "1992-2002 Census of Fatal Occupational Injuries" in "Census of Fatal Occupational Injuries (CFOI) - Current and Revised Data," Online, Internet, <http://www.bls.gov/iif/oshcfoi1.htm>, Accessed April 3, 2014.

United States Department of Commerce, Bureau of the Census. *Thirteenth Census of the United States Taken in the Year 1910, Vol. IV. Population: 1910. Occupation Statistic.* Washington, D.C.: Government Printing Office, 1914.

———. *Fourteenth Census of the United States Taken in the Year 1920, Volume IV: Population, 1920, Occupations.* Washington D.C.: Government Printing Office, 1923.

———. *Fifteenth Census of the United States Taken in the Year 1930.* Vol. IV.

- Population: 1930. Occupations, By States* (Washington, D.C.: Government Printing Office, 1932).
- United States Industrial Commission, *Final Report of the Industrial Commission*. Washington D.C.: Government Printing Office, 1902.
- United States Public Health Service, *Municipal Ordinances, Rules, and Regulations Pertaining to Public Health* (Washington D.C.: General Printing Office, 1917)
- United States Senate, *Report on Condition of Woman and Child Wage-Earners in the United States, Volume 12: Employment of Women in Laundries*. Washington D.C.: Government Printing Office, 1911
- Voorhies, George. *Treatise on the Law of the Measure of Damages for Personal Injuries*. Norwalk: Laning, 1903.
- Ward, Harry Frederick. *The Social Creed of the Churches*. New York: Abingdon Press, 1914.
- Welfare Federation of Cleveland, *Education and Occupations of Cripples Juvenile and Adult: A Survey of All the Cripples of Cleveland, Ohio, in 1916*. Cleveland: Welfare Federation of Cleveland, 1916.
- White, John P. "Compulsory Physical Examination." *The Shoe Workers' Journal* 17, no. 12 (December 1916): 3-4.
- Wilford, Lloyd. *The Administration of Workmen's Compensation in Minnesota*. Minneapolis: University of Minnesota Press, 1930.
- Wood, H.G. *A Treatise on the Law of Master and Servant covering the Relations, Duties and Liability of Employers and Employees*. Albany: John D. Parsons, Jr., 1877.
- Workmen's Compensation Acts in the United States: The Legal Phase* Boston: National Industrial Conference Board, 1919.
- Workmen's Compensation Law of the State of Iowa* (New York: Robertson Jones, 1914)
- "Workmen's Compensation Laws of the United States and Foreign Countries." *Bulletin of the United States Bureau of Labor Statistics*, no. 203 Washington: Government Printing Office, 1917.

Secondary Sources

- Abdullah, Ibrahim. "Rethinking the Freetown Crowd: The Moral Economy of the 1919 Strikes and Riot in Sierra Leone." *Canadian Journal of African Studies / Revue Canadienne des Études Africaines* 28, no. 2 (1994): 197-218.
- Aglietta, Michel. "Capitalism at the Turn of the Century: Regulation Theory and the Challenge of Social Change." *New Left Review* no. 232 (1998): 41-90.
- . *A Theory of Capitalist Regulation: The U.S. Experience*, 2nd ed. London: Verso, 2000.
- Aldrich, Mark. *Safety First: Technology, Labor, and Business in the Building of American Work Safety*. Baltimore: Johns Hopkins University Press, 1997.
- Alexander, Jennifer. *The Mantra of Efficiency: From Waterwheel to Social Control*. Baltimore: Johns Hopkins University Press, 2008.
- Anderson, Odin W. *Health Services in the United States: A Growth Enterprise Since 1875*. Ann Arbor: Health Administration Press, 1985.
- Anderson, Perry. *Considerations on Western Marxism*. New Left Review Books: London, 1976.
- Asher, Robert. "Business and Workers' Welfare: Workmen's Compensation Reform in Massachusetts, 1880-1911." *The Business History Review* 43, no. 4 (Winter 1969): 452-475
- . "Radicalism and Reform: State Insurance of Workmen's Compensation in Minnesota, 1910-1933." *Labor History* 14. (1973): 19-41.
- Baker, Tom and Jonathan Simon, eds. *Embracing Risk: The Changing Culture of Insurance and Responsibility*. Chicago: University of Chicago Press, 2002.
- Baker, Tom. "Containing the Promise of Insurance: Adverse Selection and Risk Classification" In *Risk and Morality*, edited by Richard Victor Ericson and Aaron Doyle, 258-283. Toronto: University of Toronto Press, 2003.
- Barr, Nicholas. *Economics of the Welfare State*. Stanford: Stanford University Press, 1993.
- Baynton, Douglas. "Disability and the Justification of Inequality in American History."

In *The New Disability History: American Perspectives*, edited by Paul Longmore and Lauri Umansky, 33-57. New York: New York University Press, 2001.

Beach, Lee Roy. *Leadership and the Art of Change: A Practical Guide to Organizational Transformation*. Thousand Oaks: Sage, 2006.

Beck, Ulrich. *World Risk Society*. Cambridge: Polity Press, 1999.

Beckert, Sven. "History of American Capitalism." In *American History Now* edited by Eric Foner and Lisa McGirr, 314-335. Philadelphia: Temple University Press, 2011.

Bellamy, Paul. "From court room to board room: Immigration, juries, corporations and the creation of an American proletariat: A history of workmen's compensation, 1898-1915." PhD diss., Case Western Reserve University, 1994

Benjamin, Walter. "Theses on the Philosophy of History." In Walter Benjamin, *Illuminations: Essays and Reflections*, edited by Hannah Arendt, 253-264. New York: Harcourt, 1968.

Berk, Gerald. *Alternative Tracks: The Constitution of American Industrial Order*. Baltimore: Johns Hopkins University Press, 1994.

Berman, David. *Politics, Labor, and the War on Big Business: The Path of Reform in Arizona, 1890-1920*. Boulder: University Press of Colorado, 2012.

———. *Reformers, Corporations, and the Electorate: An Analysis of Arizona's Age of Reform*. Niwot: University Press of Colorado, 1992.

Blackmon, Douglas. *Slavery by Another Name: The Re-Enslavement of Black Americans from the Civil War to World War II*. New York: Doubleday, 2008.

Blair, Asata P. *Prison Labor in the United States: An Economic Analysis*. New York: Routledge, 2008.

Blumenthal, Susanna. "'Death by his own hand': Accounting for Suicide in Nineteenth-Century Life Insurance Litigation." In *Subjects of Responsibility: Framing Personhood in Modern Bureaucracies*, edited by Andrew Parket, Austin Sarat, and Martha Merrill Umphrey, 98-144. New York: Fordham University Press, 2011.

- Boris, Eileen. "Labor's Welfare State: Defining Workers, Constructing Citizens." In *The Cambridge History of Law in America, Volume III: The Twentieth Century and After*, edited by Michael Grossberg and Christopher Tomlins, 319-358. Cambridge: Cambridge University Press, 2008.
- Bouk, Daniel. "The Science of Difference: Designing Tools for Discrimination in the American Life Insurance Industry, 1830-1930." Ph.D. diss., Princeton University, 2009.
- Boydston, Jeanne. *Home and Work: Housework, Wages, and the Ideology of Labor in the Early Republic*. New York, 1990.
- Boyer, Robert. *The Regulation School: A Critical Introduction*. New York: Columbia University Press, 1990.
- Bertolt Brecht, *Bertolt Brecht: Poems 1913-1956*. Edited by John Willett and Ralph Manheim. New York: Routledge, 1987.
- Brecht, Bertolt. *Manual of Piety*. Translated by Eric Bentley. New York: Grove Press, 1994.
- Brown, Wendy. *States of Injury: Power and Freedom in Late Modernity*. Princeton: Princeton University Press, 1995.
- Buder, Stanley. *Capitalizing on Change: A Social History of American Business*. Chapel Hill: University of North Carolina Press, 2009.
- Burnstein, Daniel Eli. *Next to Godliness: Confronting Dirt and Despair in Progressive Era New York City*. Urbana: University of Illinois Press, 2006.
- Cameroon, Ardis. *Radicals of the Worst Sort: Laboring Women in Lawrence Massachusetts, 1860-1912*. Urbana: University of Illinois Press, 1993.
- Campbell, Ballard C. *Disasters, Accidents, and Crises in American History: A Reference Guide to the Nation's Most Catastrophic Events*. New York: Facts on File, 2008.
- Canaday, Margot. *The Straight State: Sexuality and Citizenship in Twentieth-Century America*. Princeton: Princeton University Press, 2009.
- Canning, Kathleen. *Gender History in Practice: Historical Perspectives on Bodies, Class, and Citizenship*. New York: Cornell, 1996.

- Carter, Susan B. *et al. Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition*. New York: Cambridge University Press, 2006.
- Casebeer, Kenneth M. "At-Will Employment." In *Encyclopedia of United States Labor and Working-class History*, edited by Eric Arnesen, 136-137. New York: Routledge, 2007.
- Castrovinci, Joseph. "Prelude to Welfare Capitalism: The Role of Business in the Enactment of Workmen's Compensation Legislation in Illinois, 1905-12." *Social Service Review* 50, no.1 (March 1976): 80-102.
- Cayton, Mary Kupiec. "What is Public Culture? Agency and Contested Meaning in American Culture - An Introduction." In *Public Culture: Diversity, Democracy, and Community in the United States*, edited by Marguerite S. Shaffer, 1-28. Philadelphia: University of Pennsylvania Press.
- Chandler, Alfred D. *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge: The Belknap Press of Harvard University Press, 1990.
- . *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: The Belknap Press of Harvard University Press, 1977.
- Cleaver, Harry. *Reading Capital Politically*. London: AK Press, 2000.
- Coen, Robert M. "Labor Force and Unemployment in the 1920's and 1930's: A Re-Examination Based on Postwar Experience." *The Review of Economics and Statistics* 55, no.1 (1973): 46-55.
- Cohen, Andrew Wender. *The Racketeer's Progress: Chicago and the Struggle for the Modern Economy, 1900-1940*. Cambridge, UK: Cambridge University Press, 2004.
- Cohen, Lizabeth. *A Consumers' Republic: The Politics of Mass Consumption in Postwar America*. New York: Knopf, 2003.
- Cole, Thomas R. *The Journey of Life: A Cultural History of Aging in America*. Cambridge: Cambridge University Press, 1992.
- Cooper, Frederick. "Africa and the World Economy." In Frederick Cooper *et al*,

- Confronting Historical Paradigms: Peasants, Labor and the Capitalist World System in Africa and Latin America*, 84-204. Madison: University of Wisconsin Press, 1993.
- Corn, Jacqueline. *Environment and Health in Nineteenth Century America: Two Case Studies*. New York: Peter Lang, 1989.
- . *Protecting the Health of Workers: The American Conference of Governmental Industrial Hygienists, 1938-1988*. Cincinnati: American Conference of Government Industrial Hygienists, 1989.
- . *Response to Occupational Health Hazards: A Historical Perspective*. New York: Van Nostrand Reinhold, 1992.
- Cott, Nancy F. *Public Vows: A History of Marriage and the Nation*. Cambridge: Harvard University Press, 2000.
- Cronon, William. "A Place for Stories: Nature, History, and Narrative." *Journal of American History* 78, no. 4 (March 1992): 1347-1376.
- . *Changes in the Land: Indians, Colonists, and the Ecology of New England*. New York: Hill & Wang, 1983.
- Davis, Natalie Zemon. *Fiction in the Archives: Pardon Tales and Their Tellers in Sixteenth-century France*. Stanford: Stanford University Press, 1987.
- Dawley, Alan, *Struggles for Justice: Social Responsibility and the Liberal State*. Cambridge: Harvard University Press, 1991.
- Defert, Daniel. "'Popular Life' and Insurance Technology." in Graham Burchell, Colin Gordon, and Peter Miller, *The Foucault Effect: Studies in Governmentality*. London: Harvester Wheatsheaf, 1991.
- Derickson, Alan. *Workers Health, Workers Democracy: The Western Miners' Struggle, 1891-1925*. Ithaca: Cornell University Press, 1989.
- Dubofsky, Melvyn. *We Shall Be All: A History of the Industrial Workers of the World*. Chicago: Quadrangle Books, 1969.
- Edge, Laura Bufano. *We Stand As One: The International Ladies Garment Workers' Strike, New York 1909*. Minneapolis: Twenty First Century Books, 2011.

- Edwards, Rebecca. "Politics, Social Movements, and the Periodization of U.S. History." *The Journal of the Gilded Age and Progressive Era* 8, no. 4 (October 2009): 461-473.
- Eisner, Marc Allen. *Regulatory Politics in Transition*. Baltimore: Johns Hopkins University Press, 1993.
- Everett, Shawn and Price V. Fishback, "How Minnesota Adopted Workers' Compensation." *The Independent Review* 2, no.4 (1998): 557-578.
- Ewald, François. "Insurance and Risk." In *The Foucault Effect: Studies in Governmentality* edited by Graham Burchell, Colin Gordon, and Peter Miller, 197-210. Chicago: University of Chicago Press, 1991.
- Fairchild, Amy L. *Science at the Borders: Immigrant Medical Inspection and the Shaping of the Modern Industrial Labor Force*. Baltimore, Johns Hopkins University Press, 2003.
- Federici, Silvia. *Caliban and the Witch: Women, the Body and Primitive Accumulation*. New York: Autonomedia, 2004.
- Feurer, Rosemary. *Radical Unionism in the Midwest, 1900-1950*. Chicago: University of Illinois Press, 2006.
- Fishback, Price and Shawn Everett Kantor, *A Prelude to the Welfare State: The Origins of Workers' Compensation*. Chicago: University of Chicago Press, 2000.
- Fishback, Price. "Workers' Compensation." In EH.Net Encyclopedia, edited by Robert Whaples. Online, Internet, <http://eh.net/encyclopedia/article/fishback.workers.compensation> accessed April 1, 2013.
- Flanagan, Maureen. *America Reformed: Progressives and Progressivisms, 1890s-1920s*. New York: Oxford University Press, 2007.
- Forbath, William. *Law and the Shaping of the American Labor Movement*. Cambridge, MA: Harvard University Press, 1991.
- Fortunati, Leopoldina. *The Arcane of Reproduction*. New York: Autonomedia, 1995.
- Foucault, Michel. *The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979*.

- New York: Picador, 2008.
- . *Security, Territory, Population: Lectures at the Collège de France 1977-1978*. New York: Picador, 2007.
- . “*Society Must Be Defended*”: *Lectures at the Collège de France, 1975-1976*. New York: Picador, 2003.
- Freund, David M. P. *Colored Property: State Policy and White Racial Politics in Suburban America*. Chicago: University of Chicago Press, 2007.
- Friedman, Lawrence M. “Civil Wrongs: Personal Injury Law in the Late 19th Century.” *American Bar Foundation Research Journal* 12, No. 2/3 (Spring - Summer, 1987): 351-378.
- Furner, Mary O. “The Republican Tradition and the New Liberalism.” In *The State and Social Investigation in Britain and the United States* edited by Michael J. Lacey and Mary O. Furner, 171-241. New York: Cambridge University Press, 1993.
- Gagliardo, Domenico. “First Kansas Workmen’s Compensation Law.” *Kansas Historical Quarterly* 9, no. 4 (November 1940): 384-397.
- . *American Social Insurance*. New York: Harper & Brothers, 1955.
- Geertz, Clifford. “Thick Description: Toward an Interpretive Theory of Culture.” In Clifford Geertz, *The Interpretation of Cultures*, 3-32. New York: Basic Books, 1973.
- Genovese, Eugene. *Roll, Jordan, Roll: The World The Slaves Made*. New York: Pantheon Books, 1974.
- Gitelman, Lisa. *Paper Knowledge: Toward a Media History of Documents*. Durham: Duke University Press, 2014.
- Glenn, Evelyn Nakano. *Unequal Freedom: How Race and Gender Shaped American Citizenship and Labor*. Cambridge: Harvard University Press, 2002.
- Glickman, Lawrence B. *A Living Wage: American Workers and the Making of Consumer Society*. Ithaca: Cornell University Press, 1997.
- Goluboff, Risa. *The Lost Promise of Civil Rights*. Cambridge, MA: Harvard University Press, 2007.

- Gordon, Linda. "If the Progressives Were Advising Us Today, Should We Listen?" *The Journal of the Gilded Age and Progressive Era* 1, no. 2 (April 2002): 109-121.
- Gordon, Robert. "Critical Legal Histories." *Stanford Law Review* 36, no. 57 (1984): 57-125.
- . "J. Willard Hurst and the Common Law Tradition in American Legal Historiography." *10 Law & Society Review* 10 (Fall 1975): 9-56.
- . "Law as Vocation: Holmes and the Lawyer's Path, in Burton, *The Path of the Law and its Influence*, 7-32
- Greenwald, Richard A. *The Triangle Fire, the Protocols of Peace, and Industrial Democracy in Progressive Era*. New York. Philadelphia: Temple University Press, 2005.
- Hacking, Ian. *Historical Ontology*. Cambridge: Harvard University Press, 2002.
- Hardt, Michael and Antonio Negri, *Labor of Dionysus: A Critique of the State-Form*. Minneapolis: University of Minnesota Press, 1994.
- Harris, Howell John. *Bloodless Victories: The Rise and Fall of the Open Shop in the Philadelphia Metal Trades, 1890-1940*. Cambridge: Cambridge University Press, 2000.
- Harvey, David. *A Brief History of Neoliberalism*. Oxford: Oxford University Press, 2005.
- . *A Companion to Marx's Capital*. London: Verso, 2010.
- Heclo, Hugh. *Modern Social Politics in Britain and Sweden: From Relief to Income Maintenance*. New Haven: Yale University Press, 1974.
- Heinrich, Michael. *Introduction to the Three Volumes of Karl Marx's Capital*, translated by Alexander Locascio. New York: Monthly Review Press, 2012.
- Ho, Karen. *Liquidated: An Ethnography of Wall Street*. Durham: Duke University Press, 2009.
- Hoffman, Beatrix. "Scientific Racism, Insurance and Opposition to the Welfare State: Frederick L. Hoffman's Transatlantic Journey." *Journal of the Gilded Age and Progressive Era* 2 (April 2003): 150-190.

- Holdren, Nate. "Transatlantic Slave Trade." In *Encyclopedia of Global Human Migration* edited by Immanuel Ness. New York: Wiley-Blackwell, 2013.
- Horan, Caley. "Actuarial Age: Insurance and the Emergence of Neoliberalism in the United States." Ph.D. diss., University of Minnesota, 2011.
- Horowitz, Ruth L. *Political Ideologies of Organized Labor: The New Deal Era*. New Brunswick: Transaction, 1978.
- Igra, Anna R. *Wives Without Husbands: Marriage, Desertion, & Welfare in New York, 1900-1935*. Chapel Hill: The University of North Carolina Press, 2007.
- Johnson, Walter. "On Agency." *Journal of Social History* 37, no. 1 (Autumn 2003): 113-124.
- . *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom*. Cambridge: Belknap Press of Harvard University Press, 2013.
- Johnston, Robert D. "The Possibilities of Politics: Democracy in America, 1877 to 1917." In *American History Now* edited by Eric Foner and Lisa McGirr, 96-124. Philadelphia: Temple University Press, 2011.
- . "Re-Democratizing the Progressive Era: The Politics of Progressive Era Political Historiography." *The Journal of the Gilded Age and Progressive Era* 1, no.1 (January 2002): 68-92.
- Jones, Marian Moser. *The American Red Cross from Clara Barton to the New Deal*. Baltimore: Johns Hopkins University Press, 2013.
- Karsten, Peter. *Heart versus Head: Judge-Made Law in Nineteenth-Century America*. Chapel Hill: University of North Carolina Press, 1997.
- Keller, Morton. *Regulating a New Economy: Public Policy and Economic Change in America, 1900-1933*. Cambridge, Mass.: Harvard University Press, 1994.
- Kerber, Linda K. *No Constitutional Right To Be Ladies: Women and Obligations of Citizenship*. New York: Hill & Wang, 1998.
- Kessler-Harris, Alice. *In Pursuit of Equity: Women, Men, and the Pursuit of Economic Citizenship in 20th-Century America*. Oxford: Oxford University Press, 2001.

- Kleeberg, John M. "From Strict Liability to Workers' Compensation: The Prussian Railroad Law, the German Liability Act, and the Introduction of Bismarck's Accident Insurance in Germany, 1838-1844." *New York University Journal of International Law and Politics* 36, no.1 (Fall 2003): 53-132.
- Klein, Jennifer. *For All These Rights: Business, Labor, and the Shaping of America's Public*. Princeton: Princeton University Press, 2003.
- Kolko, Gabriel. *Triumph of Conservatism: A Reinterpretation of American History, 1900-1916*. New York: The Free Press, 1963.
- Kraut, Alan. *Silent Travelers: Germs, Genes, and the Immigrant Menace*. Baltimore: Johns Hopkins University Press, 1995.
- Kudlick, Catherine and Paul Longmore, "Disability and the Transformation of Historians' Public Sphere." *Perspectives on History* 44, no. 8 (November 2006).
- Kurana, Rakesh. "MBAs Gone Wild." *American Interest* (July–August 2009), Online, Internet, <http://www.the-american-interest.com/articles/2009/7/1/mbas-gone-wild/> Accessed 2/1/2014.
- Lambert, Josiah Bartlett. *"If the Workers Took a Notion": The Right to Strike and American Political Development*. Ithaca, NY: Cornell University Press, 2005.
- Lamoreaux, Naomi R. *The Great Merger Movement in American Business, 1895-1904*. Cambridge: Cambridge University Press, 1985.
- Law, Marc T. "The Origins of State Pure Food Regulation." *The Journal of Economic History* 63, no. 4 (December 2003): 1103-1130.
- Lears, Jackson. *Rebirth of a Nation: The Making of Modern America, 1877-1920*. New York: Harpers, 2009.
- Leavitt, Judith Walzer. *Typhoid Mary: Captive to the Public's Health*. Boston: Beacon Press, 1996.
- Levy, Jonathan. *Freaks of Fortune: The Emerging World of Capitalism and Risk in America*. Cambridge: Harvard University Press, 2012.
- Liachowitz, Claire H. *Disability as a Social Construct: Legislative Roots*. Philadelphia: University of Pennsylvania Press, 1988.

- Livingston, James. *Origins of the Federal Reserve System, 1890-1913*. Ithaca: Cornell University Press, 1986.
- . *Pragmatism and the Political Economy of Cultural Revolution, 1850-1940*. Chapel Hill: University of North Carolina Press, 1994.
- Lubove, Roy. *The Struggle for Social Security, 1900-1935*. Cambridge: Harvard University Press, 1968.
- . "Workmen's Compensation and the Prerogatives of Voluntarism." *Labor History* 8, no. 3 (Fall 1967): 254-279.
- MacIntyre, Alasdair. *After Virtue: A Study in Moral Theory*. Notre Dame: University of Notre Dame Press, 1981.
- Mandell, Nikki. *The Corporation As Family: The Gendering of Corporate Welfare, 1890 to 1930*. Chapel Hill: University of North Carolina Press, 2002.
- Marks, Rachel. "Effects of Early Workmen's Compensation Legislation on the Employment of the Handicapped, 1897-1915." *The Social Service Review* 25, no. 1 (March 1951): 60-78.
- Marx, Karl. *Capital, Volume I: A Critique of Political Economy*. London: Penguin, 1976.
- . *Marx-Engels Gesamtausgabe: Vierte Abteilung IV. Exzerpte, Notizen, Marginalien. Band 2*. Berlin: Dietz Verlag, 1981.
- May, Vanessa H. *Unprotected Labor: Household Workers, Politics, and Middle-Class Reform in New York, 1870-1940*. Chapel Hill: University of North Carolina Press, 2011.
- McEvoy, Arthur. "Freedom of Contract, Labor, and the Administrative State." In *The State and Freedom of Contract* edited by Harry N. Schreiber, 198-235. Stanford: Stanford University Press 1998.
- McGerr, Michael. *A Fierce Discontent: The Rise and Fall of the Progressive Movement in America 1870-1920*. New York: Free Press, 2003.
- McLennan, Rebecca. *The Crisis of Imprisonment: Protest, Politics, and the Making of the*

- American Penal State, 1776 – 1941*. Cambridge: Cambridge University Press, 2008.
- Merrill, Michael and E.P. Thompson, “An Interview with E.P. Thompson.” *Radical History Review* 3, no. 12 (1976): 4-25.
- Milkis, Sidney. “Introduction: Progressivism, Then and Now.” In *Progressivism and the New Democracy*, edited by Sidney Milkis and Jerome Mileur, 1-39. Amherst: University of Massachusetts Press, 1999.
- Miller, Michael F. “An Interview with Lawrence W. Levine.” *Folklore Forum* 21, no. 1, (1998): 41-55.
- Mintz, Sidney. *Sweetness and Power: The Place of Sugar in Modern History*. New York: Penguin, 1985.
- Mnookin, Jennifer L. “Idealizing Science and Demonizing Experts: An Intellectual History of Expert Evidence.” *Villanova Law Review*, 52, no. 4 (2007): 763-802.
- Mohun, Arwen P. *Risk: Negotiating Safety in American Society*. Baltimore: The Johns Hopkins University Press, 2013.
- Montgomery, David. *Fall of the House of Labor: The Workplace, the State, and American Labor Activism, 1865-1925*. Cambridge: Cambridge University Press, 1987.
- Moss, David A. *Socializing Security: Progressive-Era Economists and the Origins of American Social Policy*. Cambridge: Harvard University Press, 1996.
- . *When All Else Fails: Government as the Ultimate Risk Manager*. Cambridge: Harvard University Press, 2004.
- Muhl, Charles J. “The Employment-At-Will Doctrine: Three Major Exceptions.” *Monthly Labor Review* 124 (January 2001): 3-11.
- Murphy, Sharon. *Investing in Life: Insurance in Antebellum America*. Baltimore: Johns Hopkins, 2010.
- Nelson, Barbara J. “The Origins of the Two-Channel Welfare State: Workmen’s Compensation and Mothers’ Aid.” In *Women, the State and Welfare*, edited by Linda Gordon, 123-151. Madison: University of Wisconsin Press, 1990.

- Nielsen, Kim E. *A Disability History of the United States*. Boston: Beacon Press, 2012.
- . “Historical Thinking and Disability History.” *Disability Studies Quarterly* 28, no.3 (Summer, 2008), Online, Internet, <http://dsq-sds.org/article/view/107/107> accessed January 15th, 2014
- . *The Radical Lives of Helen Keller*. New York: New York University Press, 2004.
- Norris, Frank. *A Deal in Wheat And Other Stories of the New and Old West*. New York: Doubleday Page, 1903.
- Novak, William J. *The People's Welfare: Law and Regulation in Nineteenth-Century America*. Chapel Hill: University of North Carolina Press, 1996.
- . “The Myth of the 'Weak' American State.” *American Historical Review* 113, no.3 (June 2008): 752-772.
- Nugent, Angela. “Fit for Work: The Introduction of Physical Examinations in Industry.” *Bulletin of the History of Medicine* 57 (1983): 578-595.
- O'Brien, Ruth. *Workers' Paradox: The Republican Origins of New Deal Labor Policy, 1886-1935*. Chapel Hill: University of North Carolina Press, 1998.
- Oshinsky, David M. *Worse than Slavery: Parchman Farm and the Ordeal of Jim Crow Justice*. New York: Free Press, 1996.
- Owen, Laura. “History of Labor Turnover in the U.S.” In EH.Net Encyclopedia, edited by Robert Whaples. Online, Internet, <http://eh.net/encyclopedia/article/owen.turnover>, accessed February 20, 2014
- . “Worker Turnover in the 1920s: The Role of Changing Employment Policies.” *Industrial and Corporate Change*, 4, no. 3 (1995): 499-530.
- Panzieri, Raniero. “Surplus Value and Planning: Notes on the Reading of Capital.” In *The Labour Process and Class Strategies*, edited by the Conference of Socialist Economists, 4-25. London: Conference of Socialist Economists, 1976.
- Pearson, Chad. “From the Labor Question to the Labour History Question.” *Labour/Le Travail* 66 (Fall 2010): 195-230.

- Perelman, Michael, *Railroading Economics: The Creation of the Free Market Mythology*. New York: Monthly Review Press, 2006.
- Pietruska, Jamie. "U.S. Weather Bureau Chief Willis Moore and the Reimagination of Uncertainty in Long-Range Forecasting." *Environment and History* 17, no. 1 (February 2011): 79-105.
- Piott, Steven. *American Reformers 1870-1920*. Lanham: Rowman & Littlefield Publishers, 2006.
- . *Daily Life in the Progressive Era*. Oxford: Greenwood Press, 2011.
- Polanyi, Karl. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press, 1944.
- Porter, Ann. *Gendered States: Women, Unemployment Insurance, and the Political Economy of the Welfare State in Canada, 1945-1997*. Toronto: University of Toronto Press, 2003.
- Posusney, Marsha Pripstein. "Irrational Workers: The Moral Economy of Labor Protest in Egypt." *World Politics* 46, no. 1 (October 1993): 83-120.
- Poulantzas, Nicos. *State, Power, Socialism*. London: New Left Books, 1978.
- Prechel, Harland. *Big Business and the State: Historical Transitions and Corporate Transformation, 1880s-1990s*. Albany: State University of New York Press, 2000.
- Premo, Bianca. *Children of the Father King: Youth, Authority, and Legal Minority in Colonial Lima*. Chapel Hill: University of North Carolina Press, 2005.
- Ransom, Roger L. and Richard Sutch, "The Impact of Aging on the Employment of Men in American Working-Class Communities at the End of the Nineteenth Century." In *Aging in the Past: Demography, Society, and Old Age* edited by David I. Kertzer and Peter Laslett, 303-327. Berkeley: University of California Press, 1995.
- Rediker, Marcus. *The Slave Ship: A Human History*. New York: Viking, 2007.
- Rees, Jonathan. "X, XX, and X-3: Spy Reports from the Colorado Fuel & Iron Company Archives." *Colorado Heritage* (Winter, 2004): 28-41.
- Renan, Ernst. "What is a Nation?" In *Nation and Narration*, edited by Homi K. Bhabha,

- 8-22. Abingdon: Routledge, 1990.
- Richards, Raymond. *Closing the Door to Destitution: The Shaping of the Social Security Acts of the United States and New Zealand*. University Park: The Pennsylvania University Press, 1994.
- Rodgers, Daniel. *Age of Fracture*. Cambridge: Harvard University Press, 2011.
- . *Atlantic Crossings: Social Politics in a Progressive Age*. Cambridge: Harvard University Press, 1998.
- Rodriguez, Chantel. "Health on the Line: The Politics of Citizenship and the Railroad Bracero Program of World War II." PhD diss., University of Minnesota, 2013.
- Rogers, Donald. *Making Capitalism Safe: Work Safety and Health Regulation in America, 1880-1940*. Urbana: University of Illinois Press, 2009.
- Rogin, Michael. "Voluntarism: The Political Functions of an Antipolitical Doctrine." *Industrial and Labor Relations Review* 15 no. 4 (July 1962): 521-535.
- Rorty, Richard. *Truth and Progress: Philosophical Papers, Volume Three*. Cambridge: Cambridge University Press, 1998.
- Rose, Sarah. "'Crippled' Hands: Disability in Labor and Working-Class History." *Labor: Studies in Working-Class History of the Americas* 2, no. 1 (2005): 27-54.
- . "No Right to be Idle: The Invention of Disability, 1850-1930." PhD diss., University of Illinois at Chicago, 2008.
- Rosenberg, Charles. *The Care of Strangers: The Rise of America's Hospital System*. New York: Basic Books, 1987.
- Rosenthal, Caitlin. "From Memory to Mastery: Accounting for Control in America, 1750-1880." *Enterprise & Society* 14, no.4 (December 2013): 732-748.
- . "Storybook-keepers: Numbers and Narratives in Nineteenth-Century America." *Common-Place* 12, no.3 (April 2012), Online, Internet, <http://www.common-place.org/vol-12/no-03/rosenthal/> accessed February 1, 2014
- Rosner, David and Gerald Markowitz, "A Gift of God: The Public Health Controversy over Leaded Gasoline During the 1920s." *American Journal of Public Health* 75 no.4 (April 1985): 344-352.

- . *Deadly Dust: Silicosis and the Politics of Occupational Disease in Twentieth-Century America*. Princeton: Princeton University Press, 1994.
- . *Dying for Work: Workers' Safety and Health in Twentieth-century America*. Bloomington: Indiana University Press, 1987.
- Roy, William G. *Socializing Capital: The Rise of the Large Industrial Corporation in America*. Princeton: Princeton University Press, 1997.
- Rutkow, Ira. *Seeking the Cure: A History of Medicine in America*. New York: Scribner, 2010.
- Salerno, Salvatore. *Red November, Black November: Culture and Community in the Industrial Workers of the World*. Albany: State University of New York Press, 1989.
- Salyer, Lucy. *Laws Harsh As Tigers: Chinese Immigrants and the Shaping of Modern Immigration Law*. Chapel Hill: University of North Carolina Press, 1995.
- Schmitt, Carl. *Political Theology: Four Chapters on the Concept of Sovereignty*, Translated by George Schwab. Chicago: University of Chicago Press, 2005.
- Schmitz, Christopher. "The Worlds Largest Industrial Companies of 1912." *Business History* 37, no. 4 (1995): 85-96.
- Schweik, Susan. *The Ugly Laws: Disability in Public*. New York: NYU Press, 2009.
- Scott, James C. *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press, 1998.
- Selleck, Henry B. and Alfred H. Whittaker, *Occupational Health in America*. Detroit: Wayne State University, 1962.
- Sellers, Christopher. *Hazards of the Job: From Industrial Disease to Environmental Health Science*. Chapel Hill: University of North Carolina Press, 1997.
- . "The Public Health Service's Office of Industrial Hygiene and the Transformation of Industrial Medicine." *Bulletin of the History of Medicine* 65, no. 1 (Spring 1991): 42-73.

- Sewell, William H., Jr. "A Strange Career: The Historical Study of Economic Life." *History and Theory* 49 (December 2010): 146-166.
- Shah, Nayan. *Contagious Divides: Epidemics and Race in San Francisco's Chinatown*. Berkeley: University of California Press, 2001.
- Shockley, Megan Taylor. *We, Too, Are Americans: African American Women in Detroit and Richmond, 1940-1945*. Urbana: University of Illinois Press, 2003.
- Shorter, Edward. *Bedside Manners: The Troubled History of Doctors and Patients*. New York: Simon and Schuster, 1985.
- Siegel, Reva. "Home As Work: The First Woman's Rights Claims Concerning Wives' Household Labor, 1850-1880." *Yale Law Journal* 103 (1994): 1073-1217.
- Simons, Robert A. *When Bad Things Happen to Good Property*. Washington, D.C.: Environmental Law Institute, 2006.
- Sinyai, Clayton. *Schools of Democracy: A Political History of the American Labor Movement*. Ithaca, NY: Cornell University Press, 2006.
- Sklar, Martin. *The Corporate Reconstruction of American Capitalism, 1890-1916*. Cambridge: Cambridge University Press, 1988.
- Sliter-Hays, Sara. "Narratives and Rhetoric: Persuasion in Doctors' Writing about the Summer Complaint, 1883-1939." PhD diss., University of Texas at Austin, 2008.
- Smallwood, Stephanie. "Commodified Freedom: Interrogating the Limits of Anti-Slavery Ideology in the Early Republic." *Journal of the Early Republic* 24 (Summer, 2004): 289-98.
- Southern, David. *The Progressive Era and Race: Reaction and Reform, 1900-1917*. Wheeling: Harlan Davidson, 2005.
- Stanley, Amy Dru. *From Bondage to Contract: Wage Labor, Marriage and the Market in the Age of Slave Emancipation*. Cambridge: Cambridge University Press, 1998.
- Starr, Paul. *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry*. New York: Basic Books, 1982.
- Steinbeck, John. *The Grapes of Wrath*. New York: Penguin, 2006.

- Stone, Deborah A. *The Disabled State*. Philadelphia: Temple University Press, 1984.
- . “The Struggle for the Soul of Health Insurance.” *Journal of Health Politics, Policy and Law* 18, no. 2 (June 1993): 287-317.
- Stone, Katherine V.W. and Harry Arthurs, *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*. New York: Russell Sage Foundation, 2013.
- Stromquist, Shelton. *Reinventing 'The People': The Progressive Movement, the Class Problem, and the Origins of Modern Liberalism*. Urbana: University of Illinois Press, 2006.
- . “Response: Re-Class-Ifying the Progressive Movement.” *The Journal of the Gilded Age and Progressive Era* 6, no. 4 (October, 2007): 467-471.
- Thompson, E.P. “The Moral Economy of the English Crowd in the Eighteenth Century.” In E.P. Thompson, *Customs in Common: Studies in Traditional Popular Culture*, 185-258. London: Merlin Press, 1991.
- . “The Moral Economy Reviewed.” In E.P. Thompson, *Customs in Common: Studies in Traditional Popular Culture*, 259-351. London: Merlin Press, 1991.
- . “The Peculiarities of the English.” *Socialist Register* 2 (1965): 311-362.
- . *The Making of the English Working Class*. New York: Vintage, 1966.
- Thomson, Rosemarie Garland. *Extraordinary Bodies: Figuring Physical Disability in American Culture and Literature*. New York: Columbia University Press, 1997.
- Todd, Stephen and Paul Millett, “Law, Society, and Athens.” In *Nomos: Essays in Athenian Law, Politics and Society* edited by Paul Cartledge, Paul Millett, and Stephen Todd, 1-19. Cambridge: Cambridge University Press, 1990.
- Tomlins, Christopher. “After Critical Legal History: Scope, Scale, Structure.” *Annual Review of Law and Social Science* 8, no.1 (December 2012): 31-68.
- . *Freedom Bound: Law, Labor, and Civic Identity in Colonizing English America, 1580-1865*. Cambridge: Cambridge University Press, 2010.
- . “How Who Rides Whom. Recent 'New' Histories of American Labour Law and What They May Signify.” *Social History* 20, no. 1 (1995): 1-21.

- . *Law, Labor, and Ideology in the Early American Republic*. Cambridge: Cambridge University Press, 1993.
- . “Necessities of State: Police, Sovereignty, and the Constitution.” *Journal of Policy History* 20, 1 (January 2008): 47-63.
- . *The State and the Unions: Labor Relations, Law, and the Organized Labor Movement in America, 1880-1960*. Cambridge: Cambridge University Press, 1985.
- . “The State, the Unions, and the Critical Synthesis in Labor Law History: A 25-Year Retrospect.” *Labor History* 54, no. 2 (2013): 208-221.
- . “Subordination, Authority, Law: Subjects in Labor History.” *International Labor and Working-Class History* 47 (Spring 1995): 56-90.
- . “What is Left of the Law and Society Paradigm After Critique? Revisiting Gordon’s ‘Critical Legal Histories’.” *Law and Social Inquiry* 37, no. 1 (Winter 2012): 155-66.
- Tripp, Joseph. “An Instance of Labor and Business Cooperation: Workmen’s Compensation in Washington State.” *Labor History* 17 (1976): 530-550.
- Vapnek, Lara. *Breadwinners: Working Women and Economic Independence, 1865-1920*. Champaign: University of Illinois Press 2009.
- Vego, Milan N. *Naval Strategy and Operations in Narrow Seas*. London: Frank Cass, 2003.
- Verville, Richard. *War, Politics, and Philanthropy: The History of Rehabilitation Medicine*. Lanham: University Press of America, 2009.
- Vogel, Lise. “Marxism and Feminism: Unhappy Marriage, Trial Separation or Something Else?” In *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism* edited Lydia Sargent, 195-218. Boston: South End Press, 1981.
- Wallach, Jennifer Jensen. *How America Eats: A Social History of U.S. Food and Culture*. Lanham: Rowman & Littlefield, 2012.
- Warren, Christian. *Brush with Death: A Social History of Lead Poisoning*. London: Johns

- Hopkins University Press, 2000.
- Weber, Max. *From Max Weber: Essays in Sociology*, edited by H.H. Gerth and C. Wright Mills. Abingdon: Routledge, 1991.
- Weber, Max. *Max Weber: Essays in Economic Sociology*, edited by Richard Swedberg. Princeton: Princeton University Press, 1999.
- Weinstein, James. "Big Business and the Origins of Workmen's Compensation." *Labor History* 8 (Spring 1967): 156-74.
- . *The Corporate Ideal in the Liberal State, 1900-1918*. Boston: Beacon Press, 1968.
- Welke, Barbara Young. "The Cowboy Suit Tragedy: Spreading Risk, Owning Hazard in the Modern American Consumer Economy." *Journal of American History* 1, no. 1 (June 2014): 97-121.
- . *Law and the Borders of Belonging in the Long Nineteenth Century United States*. Cambridge: Cambridge University Press, 2010.
- . "Owning Hazard: A Tragedy." *UC Irvine Law Review* 1, no. 3 (September 2011): 693-771.
- . *Recasting American Liberty: Gender, Race, Law, and the Railroad Revolution, 1865-1920*. New York and Cambridge: Cambridge University Press, 2001.
- Wesser, Robert. "Conflict and Compromise: The Workmen's Compensation Movement in New York, 1890s-1913." *Labor History* 3, no. 12. (Summer 1971): 345-72.
- White, John H. *The American Railroad Passenger Car, Volume 2*. Baltimore: Johns Hopkins University Press, 1978.
- Wildavsky, Aaron B. *Culture and Social Theory*. New Brunswick: Transaction, 1998.
- Williams-Searle, John. "Broken Brothers and Soldiers of Capital: Disability, Manliness, and Safety on the Rails, 1863-1908." Ph.D. diss, University of Iowa, 2005.
- . "Cold Charity: Manhood, Brotherhood, and the Transformation of Disability,

- 1870-1900.” In *The New Disability History: American Perspectives*, edited by Paul Longmore and Lauri Umansky, 157-186. New York: New York University Press, 2001.
- . “Courting Risk: Disability, Masculinity, and Liability on Iowa’s Railroads, 1868-1900.” *The Annals of Iowa* 58 (Winter, 1999): 27-77.
- Williams, Raymond. “Base and Superstructure in Marxist Cultural Theory.” In *Williams Culture and Materialism: Selected Essays*, 31-49. London: Verso, 1980.
- Williams, Susan. *Food in the United States, 1820s-1890*. Westport: Greenwood, 2006.
- Willrich, Michael. *Pox: An American History*. New York; Penguin, 2011.
- Witt, John Fabian. *The Accidental Republic: Crippled Workingmen, Destitute Widows, and the Remaking of American Law*. Cambridge, MA: Harvard University Press, 2004.
- . “From Loss of Services to Loss of Support: The Wrongful Death Statutes, the Origins of Modern Tort Law, and the Making of the Nineteenth-Century Family.” *Law & Social Inquiry* 25, no. 3 (Summer 2000): 717-755.
- Wolff, Megan J. “The Myth of the Actuary: Life Insurance and Frederick L. Hoffman's Race Traits and Tendencies of the American Negro.” *Public Health Reports* 121, no. 1 (2006): 84-91.
- Wood, Ellen Meiksins. “Falling Through the Cracks: E.P. Thompson and the Debate on Base and Superstructure.” In *E.P. Thompson: Critical Perspectives* edited by Harvey J. Kaye and Keith MacLelland, 125-152. Philadelphia: Temple University Press, 1990.
- Wood, Gregory. *Retiring Men: Manhood, Labor, and Growing Old in America, 1900-1960*. Lanham: University Press of America, 2012.
- Zagorsky, Jay L. “Job Vacancies in the United States: 1923 to 1994.” *Review of Economics and Statistics* 80, no. 2 (May 1998): 338-345.
- Zdatny, Steven. *The Politics of Survival: Artisans in Twentieth-Century France*. Oxford: Oxford University Press, 1990.

