The Christiana Machine Company and the Status Revolution

by Dr. Ferdinand L. Molz

Recently the author presented in this *Journal** a detailed account of the origin and development of the Christiana Machine Company in Christiana, Pennsylvania. The present article attempts to personalize that essay by evaluating the Broomell family, who owned and controlled the firm for many years, within the context of the social and business community in which they lived. For purposes of comparisons, historical studies by Richard Hofstadter on the status revolution and William Miller on the characteristics of the nineteenth century business community will be used.[1]

Comparing the social origins of the Broomells with those of the nineteenth century business community already sampled by other historians, one finds remarkable similarity. Isaac Broomell's sons were admitted as partners in the firm at a comparatively early age—Edward was twenty-three and Henry thirty years of age. Yet they probably did not have to enter the labor force until they were fairly old compared with the nation as a whole. Professor William Miller found that the average business man in his sample was at least sixteen and more likely over nineteen years old before he started work. Isaac's sons were probably eighteen years old, because the Broomells throughout the period would not accept a boy as an apprentice until his schooling was complete or he was eighteen years old. After the boys started to work they still found time to engage in outside activities, for example Edward's militia duty, but he became "the main stay of the establishment" after being admitted as a partner.[2]

The Broomells — Edward, Henry and Thomas were at least third generation Americans and the family can be taken as typical middle class in the nineteenth century. As partners their salary was

*See "A History of the Christiana Machine Company: 1863-1920," *Journal of the Lancaster County Historical Society* [Michaelmas 1972] Vol. 76 No. 4 pp. 173-238.

$15 per week making their basic income of $780 per year considerably above the national average. This does not include cash payments made at various times when company profits warranted them. Although the Broomells were not born or raised in an urban environment, Lancaster County was a highly developed commercial area. In 1879 the county had two hundred industrial plants and was ranked first among all the counties in the United States in the value of its farm product per acre. This was an excellent geographic area for industrial entrepreneurial activity.

The studies of Frances Gregory, Irene New, and William Miller indicate that the business community was educated far in advance of the society as a whole. No record exists of the Broomells' education except for a reference to Isaac's education at the Green Lane Academy. It is probable, however, that the boys received at least a high school education and perhaps some college. Edward and Henry were no strangers to higher education, in fact Edward headed the committee in charge of hiring a school teacher for the Sadsbury Friends' School. The position paid sixty dollars per month because the teacher had to be a college graduate.[3] On occasions when the local school was not self-supporting Henry "assumed the bills and paid debts" but frankly had to admit "personally, I have a good deal of distaste for running a school that does not support itself."[4] Edward was progressive enough (by the standards of the day) to provide his daughters with a college education and was very disappointed when he temporarily could not afford it during the 1896 depression:

> I am very desirous of doing the best I can for her with the least possible outlay of money, in ordinary times, this money question would not figure so prominently in making up our decision, but when there is no profit at all in business, as has been the case for the past two years, it becomes a serious matter to spend as much on one daughter's schooling, as is required to send her to Swarthmore, in fact I am not sure I can afford it at all this year: it hurts me to think of the possibility of her having to remain at home just at this time, and I shall make every possible effort to send her somewhere.[5]

From this limited amount of information in Company records, it seems safe to assume that the Broomells were favorably disposed towards education in general and higher education in particular.

The reaction of the middle class to America's rapid, large scale industrialization in the latter part of the nineteenth century, described by Richard Hofstadter as "the status revolution", can readily be seen in the company correspondence.[6] Such men as Henry Clay Frick and J. P. Morgan were little more than shadowy figures, behind economic empires, totally absent for the most part from the Broomells' business frame of reference.[7] But the activities of such men, especially in pricing Christiana's raw materials (iron, steel, and coke), definitely affected the Broomells. They wrote letters chastising the "iron and steel people" or the "coke people" for high prices, low quality and poor service. Often the Broomells thought a conspiracy to drive up price and take advantage of the small pur-

chaser lurked behind such things as delayed shipments of coke. But it was Edward's correspondence with his life insurance company which best illustrates the loss of status and the conspiracy involved. He wrote the president of the Mutual Life Insurance Company of New York:

> I have carried a policy for a small amount in your company several years and have had time to study up and reflect on the matter a good deal and some time since became convinced that the taxes are too great entirely for the benefits received.
>
> The agents who wrote my policy assured me that the dividends would so reduce the expense that the thing would be about self supporting in 15 to 18 years. Whereas the dividends became less year by year, and the amount to be paid is as great as ever. While at the same time the assets are increasing by millions and those who manage the concern receive princely salaries. In short the thing is not democratic and I wish therefore to have you give me a "paid up" policy for No. 237775 Semi Endowment. I have already a "paid up" for my old life Policy.[8]

Numerous letters of this type were written but to no avail. Edward was reacting to structural changes in the economic system totally beyond his control or for that matter understanding. According to Professor Hofstadter, the concentration of wealth and the rise of a super elite to control it absolutely dwarf the small manufacturers and other middle class Americans. Though their status within the society had not diminished, it seemed insignificant when compared with a Morgan, Vanderbilt, Harriman, Carnegie or Rockefeller.[9] One senses in the correspondence not only the growing pains of a changing economic and social system but also an innate optimism which fluctuated with the conditions of business. No matter how severe the depression, things were bound to improve if they could only hang on a little longer. But there were moments when the Broomells were at a complete loss in understanding the business cycle movements of a capitalistic economic system:

> Hence I think sometimes it would be better for you (Nathan Burnham) and your sons to own this establishment so you could have all the profits and employ some of us or some other persons to manage it for you. We could probably invest our little bit of capital so it would save us something, tho (sic). I confess I should scarcely know how to invest it. This may be a temporary dull spell, to be succeeded in the near future by a great prosperity. Many think, or profess to, that when 1888 rolls round and the reins of government fall into the hands of a good Republican administration the *millennium* will be at hand, but if we are to wait so long, I fear some of us will be starved out or have run down so low financially that we can't be saved even by the most prosperous times.[10]

Both Henry and Edward kept their despair in check by working until they were over seventy-five years old.

The Broomells took their politics seriously and were Republican by family tradition and strong local sentiment. Edward went so far as to delay a law suit to collect a delinquent account so that he could vote in the 1892 election.[11] Although active in local politics and highly critical of the town's "old fogies" who refused to incor-

porate it or establish a "board of trade"; Edward had a cynical regard for improvements in economic conditions through the political arena.[12] Even though Benjamin Harrison, a Republican, won the national election in 1888 and according to Edward the "millennium" was at hand, he cynically remarked to a customer after the election:

> We consulted with our foremen in foundry and machine shop and concluded, with the 50 or more orders on our books at the time, that it would be impossible for us to serve you in time without running right along at night, this we concluded to do, but you know it came right at the exciting time in politics and our men were so near crazy that we could not control them and the night work had to be given up. Now that the country is *saved from utter ruin,* we ask you to pardon and overlook the offence this time and we will try to do better in the future.[13]

Improvement in business conditions before the 1888 election "of a good Republican administration" probably convinced Edward that there was no positive correlation between the party in power and the state of the economy.

Part of the "status revolution" was a strong reform sentiment among the middle class. Forced to accept a relative change in status, the Broomells refused to sit idly-by and ignore the evils they thought present in society. Isaac Broomell was a reformer of long standing as noted in his obituary:

> He has always been an ardent reformer, and when the Republican party was organized, he promptly joined it, in hope that the great curse of slavery might be wiped out this he saw realized, and later, when the Prohibition Party was organized, this seemed to him to be the best way to push forward the cause of temperance. He gave it his sympathy and active support until his death.[14]

Company records contain numerous references to the Broomell's favorite reform—temperance. Not only temperance circulars distributed by the Women's Christian Temperance Union but also a temperance pledge for the heavier drinkers among Christiana's labor force appear in Company records.[15] Given the type of labor force their Company used—machinists, moulders and pattern makers (all highly skilled labor) enforcement of temperance pledges was all but impossible. In fact, the Broomells could not even control the sale of alcohol next to their factory on Sunday. The following letter written to the general manager of the Pennsylvania Railroad illustrates the problem:

> You know that your Company, recently came in possession of considerable property in our village, included in which is a house purchased from G.M. Knight. This house joins our property, in width in about 100 yards, of our office, and within about 50 yards of the dwelling of Isaac Broomell. This property is rented to a Mr. Laughead who professes to run a green grocery store on a small scale. His principal business, however seems to be the selling of what he terms "soft drink". We have strong suspicions that the drinks sold by him are not all "soft drinks", and even if they are, he conducts his business in such a way as to make it illegal and very obnoxious to this section of the town. The Methodist Minister called on him a few days ago, to see if he could prevail upon him, not to sell on Sunday. He made a total

> denial of doing business on Sunday, to this Minister. Yesterday, my wife called on him and had quite a talk with both him and his wife. Mrs. Laughead said that she objected very much to having the business conducted on Sunday but it seemed necessary to do it in order to make a living. Mr. L. said it was the best day of the week he had, and that other places in the town sell on Sunday, the same as he does. We are not aware that this is true and if it is, it does not excuse him. Such places are calculated to lead young men away from proper habits and admitting that they get nothing but soft drinks, from Mr. Laughead, it will be but a little while until they want something stronger. Many of the men from our works are regular patrons of the place and altogether we consider it a nuisance. We are told that the house on the opposite side of the street which your company purchased from Mr. Gillespie, is about being rented for the same purpose. We believe that a simple hint from us is all that you will require to have the matter attended to we have no idea that you have any knowledge of the kind of business conducted on the property.[16]

Company records contain no reply from the Pennsylvania Railroad, but even if it was disposed to do something, which was not likely, Christiana's employee could still go elsewhere for their "soft drinks." In all fairness to the Broomells, they were not overbearing in bringing the message to the "uneducated." While they did not smoke or drink they were for the most part tolerant of others who did, the temperance pledge was the only exception. Edward declined to attend the National Convention of Foundrymen in Philadelphia because, "I have had weak eyes for many years, and the tobacco smoke in the room during the meetings offended them so much that I would not get over it for some days, so I quietly stayed away, as I would not have the pleasure of other members curtailed in the least."[17]

The extent of the Broomell involvement in the temperance movement is indicated by a follow up article in the local newspaper after Eliza Broomell, Edward's first wife, died:

> Though physically weak, she labored with untiring zeal in the Master's vineyard ever willing to do and bear more than her share of the burden, and, though she has not lived to see the fruition of her hopes, yet the labor of her life is woven into the grand result, Come when it may.[18]

This tribute was placed in the newspaper by the Women's Christian Temperance Union of which Eliza Broomell "was an active member".[19] The Broomells' active participation in the temperance movement, a leading reform of the period, is important here as an illustration of one aspect of the "status revolution." Being middle class, small manufacturing-entrepreneurs forced to deal, on unequal terms, with economic giants such as the Pennsylvania Railroad or the Frick Coke Company, they became suspicious of such large economic entities and cynical of political action to bring about improvements in economic conditions. The temperance movement became a natural safety valve for their discontent. The important question is how their relative change in status within the society affected their ability to make economic decisions as entrepreneurs? Surprisingly, it would seem the Broomells' ability to innovate was almost

totally unaffected. As detailed in the previous article changes in the capital goods industries were accepted as challenges. Thus innovations in machine tools, turbines and power transmission equipment were constantly forthcoming.

The guiding moral principles or ethnics by which the Broomells conducted their personal lives were the religious principles of the Society of Friends and a strong belief in the necessity of work. A deep religious faith was an absolute necessity given the state of the medical arts in the nineteenth century. Edward had seven children by his first marriage four of whom died before their eleventh birthday. On one occasion he wrote Nathan Burnham that "our baby has been very sick for some days and I have lost so much sleep that I am nearly used up and can hardly write a readable hand today."[20] His wife, Eliza, had consumption. She was the youngest of eleven children, all but four of whom died of the disease and she died in December, 1892 at the age of forty-nine, in spite of her doctor's prognosis that "she is out of danger, and she will soon commence to improve."[21]

The Broomell's commitment to "work" can be compared in strength to their religious faith. During the busy season (spring and summer) Edward worked from 5:30 in the morning to 9:00 o'clock at night. Once he wrote his sister, Seneca, that he had second thoughts about his total commitment to business:

> . . . there seems to be very little communication between the two branches of our family of late years, all of us seem so wrapped up in our own affairs that social or friendly intercourse is relegated to the background. I often feel sorry for this, because it seems to rob life of a great part of what should be its greatest charm, and has a tendency to make one narrow and selfish. But as the years go by, and our wants increase it seems to require more and more effort to supply the means to gratify them; and so we tie ourselves down to business, and think of little else. I do not know that this applies to thee at all, but it does to myself and a great many others close around me, and I have a strong notion there are some even in Baltimore, who are not guiltless.[22]

This of course was a rationalization for a situation beyond Edward's control given the society's prevailing attitude toward work and the importance of business in a rapidly industrializing nation.

The Broomells' personal ethics would be of little concern in this discussion if they had not been applied to the conduct of their business affairs. The usual image of nineteenth century businessmen riding roughshod over the public and usurping political authority in search of profits has no factual basis in the business activities of the Broomells. Product guarantees and treatment of customers is a case in point. Christiana guaranteed every product it sold to be free of defects in workmanship and made of the best quality materials. If a product did not perform as guaranteed it was either repaired or replaced at Christiana's expense.

In their dealings with the railroads the Broomells were not

quite as honest as with their customers. But it must be made clear at the beginning of this discussion that their attempts to deceive the railroads grew out of conditions created by the railroads and not the Broomells. "Stormy" is the only word to describe the relations between the railroads, principally the Pennsylvania, and the Christiana Machine Company. Edward's favorite word to describe the railroads was "outrageous", and mentally he probably had some much stronger. Generally he thought "one of our greatest troubles in doing business is to prevent our customers from being imposed upon by the railroads."[23] Imposition on the Company and its customers occurred in three ways: high and constant changes in freight rates, constant reclassification of goods shipped by rail and poor service. After the Interstate Commerce Act was passed by Congress in 1887, the situation with the railroads actually became worse according to Edward: "This matter of freight rates is enough to turn one prematurely grey. Since the inter-state law went into effect we have to fight the R. Roads (sic) all the time to get goods shipped under the right classification."[24] In this particular case two orders of machinery were shipped to Roanoke, Virginia; the first cost 78 cents per hundred pounds and the second, 37 cents per hundred pounds. According to Edward "the same class of goods in one case charged more than double as much as the other."[25] Because of such situations Edward was constantly asking the Pennsylvania Railroad for "justice" and when it was not forthcoming the Broomells decided to arrange a little "justice" of their own.

The Pennsylvania Railroad classified turbines at a much higher rate than other equipment shipped by Christiana and Edward was at a complete loss to understand why:

> For some reason the rates on Turbine Wheels are much higher than they should be. We used to ship them to Lynchburg, Va. for 30 cts. per hundred, now we have to pay more than double that, at least we did on a wheel we shipped a short time ago, and the same seems to apply to other points. They are classified too high for some reason, and we contend there is no good reason for doing it, in as much as they are heavy for the space occupied, and very little risk is breaking.[26]

It was this type of situation which forced the Broomells to try to fool the Pennsylvania Railroad. They had sold a turbine to a customer in Duncan, South Carolina and the freight charge was 93 cents per hundred pounds but in order "to ship to the best advantage", the Broomells "counted very little of it turbine wheel."[27] Instead, "we tore it all to pieces and called them cast iron rings and plates etc., so as to strike a lower rate, and by that means keep the cost down . . ."[28] But the Pennsylvania Railroad was an old hand at playing that game, so in order to make up the difference it simply reclassified the rivoted sheet iron pipes shipped with the turbine. Instead of allowing the usual second class rate of $1.02 per hundred pounds, the pipe was reclassified to first class and the rate increased to $1.19 per hundred pounds. Edward conceded to his brother Albert, who made the pipe in York, "we apprehend it will be a good bit of trouble to get any (rebate) on this bill."[29]

It is difficult to chastise the Broomells for this type of behavior for two reasons. First, the railroads created the conditions which made this type of deception an act of self preservation. Edward wrote innumerable letters warning the railroads that price was the basis of competition in the capital good industries and excessively high freight rates would lose them many orders from the South and elsewhere. Second, railroad service throughout much of this period was unbelievably poor. Although many examples could be cited to prove this point, only a few are needed here to illustrate the problems Christiana faced with the railroads.

The central problem was breakage. If machinery had to be transferred from one box car to another during shipment Edward surmised "there will be trouble, for R.R. (sic) men will not have the patience necessary to handle it."[30] He was seldom disappointed. Once the machinery reached its destination the problem was having the railroads unload it without breaking it. On one occasion the Pennsylvania Railroad broke five out of twenty-two pulleys in a shipment and refused compensation because "they were not packed in straw.[31] Edward readily admitted they were not "packed in straw" because "it is not a common thing to do" with cast iron pulleys.[32]

The railroads usually refused compensation for their own carelessness no matter how blatant it was and even legal action against them was of little value. A case in point was a large turbine, shipped May 7, 1890 to Carthage, North Carolina. The consignee refused to accept the turbine because one of the buckets was broken. Since the buckets are inside the turbine, Edward concluded breakage "must have been by gross carelessness."[33] In order to cloud the major issue of negligence, the Pennsylvania Railroad had one of its machinists examine the turbine and "he reported it could be mended for $5.00.[34] Edward claimed that the turbine could not be fixed for $5.00 considering the amount of work involved; and beside that point, his agent in South Carolina reported that the turbine was broken by the railroad's employees placing a bar inside it to act as lever while unloading it from the car.[35]

The Broomells decided to take a firm stand and asked to have the turbine returned "free of cost" with a compensation of $50.[36] This was rejected by the railroad and at one point it even went so far to reverse itself and claim the turbine was undamaged. Edward concluded that "either that wheel is broken, or Mr. Grim (Christiana's agent in South Carolina), or some other people are huge liars."[37] Finally, the railroad agreed to ship it back free of charge if Christiana would agree to drop the law suit for compensation of the broken bucket. When the turbine was returned almost two years after it was shipped to South Carolina, Edward wrote his attorneys "it is broken just as we claimed it was all the time."[38]

Such incidents demonstrate why it is difficult to criticize the Broomells for attempting to take advantage of the railroads. In any event, they were no match for the Pennsylvania Railroad and

company records indicate they gained no advantage in attempting to manipulate the classification of goods shipped. They not only had to contend with erratic freight rates, juggled freight classifications, and breakage with little or no compensation but also a host of other problems. Among the more important were excessive freight charges based on the size of the car instead of the actual weight of the item shipped. For example, charges for gondola cars to carry scrap iron were sometimes based on the potential capacity of the cars instead of the actual amount loaded.[39] Another problem was excessive amounts of time involved in delivering goods even a comparatively short distance from Christiana. Long delays in delivering turbines to New York City for export to South America were particularly exasperating when steamship sailing dates had to be met. Finally, Christiana's pulleys had a habit of weighing more in the morning, according to the Pennsylvania Railroad's scales, than in the afternoon when weighed on the purchaser's scale. Since Christiana billed its customer according to the weight of the pulleys on the railroad scale; the company was forced to credit the customer's account for the difference in weight. To the railroad's credit, it was not without explanation. The scales had large wooden platforms, and if the morning happened to be damp, they would weigh more than if dry in the afternoon.[40] One morning the dampness weighed "19 lbs. on the light pulleys and 16 lbs. on the heavy ones."[41] The Broomells made their first complaint about the scales to the railroad in January 1890; more than five years later Christiana was still receiving complaints from its customers about the weights recorded on the railroad's scales.[42]

The transfer of personal morality and ethics to their business activities is best illustrated by the relationship between the Broomells and their labor force. Abhorrence of idleness is seen in the Broomells' reluctance to lay-off workers during slack periods. During the 1885 depression Edward wrote Nathan Burnham that "our foundrymen are all off this week and machine shop will be closed Friday and Saturday. We dislike very much to be forced to this idleness but see no immediate help for it.[43] Since at least half of Christiana's labor force consisted of skilled labor, the Broomells had an incentive to keep that part of it together to insure an adequate labor supply when prosperity returned. But it would be a mistake to take this as their only motive. A personal concern for the effects of unemployment on the men, especially those with families, cannot be disregarded.

Wage rates were determined by the market mechanism of supply and demand and to some extent the skill of the individual worker. Payment was based on a ten hour day with overtime calculated on an hourly rate determined by the basic wage. Thus if a moulder received $1.90 per ten hour day, he would receive 19 cents an hour for overtime. The choice to work overtime was at the decision of the individual worker. The Broomells' liberality with their labor force is demonstrated by an incident which occurred during the

depression year of 1895. Christiana received a large contract ($1,050.00) to make and install power transmission equipment for the Penn Cordage Co., Beverly, New Jersey. Initially the plant superintendent insisted "that the erection must be done between noon Saturday and starting time Monday morning."[44] But the man who did this type of work for Christiana "postively refuses to work on Sunday," and to accommodate him the Broomells risked losing the contract by asking the Penn Cordage Co. to stop their mill on Friday night.[45] The superintendent finally relented and Christiana got the change in work time and the contract. This respect for the religious convictions of one of their employees, in the face of possibly a substantial financial loss to themselves, is a good indication of how highly the Broomells regarded their workers. The writer interviewed several people who worked for, or knew them personally, and all universally testified to their merit as employers.

It should not be implied from the preceding discussion that the Broomells were without the nineteenth century business community's prejudice against labor unions, or above using blacklist letters to enforce their apprenticeship system. Company records indicate that the Broomells used neither yellow dog contracts nor black lists to stop union activity or control their regular labor force. But Christiana's apprentices were the exception to the rule. It irritated the Broomells to no end to have their apprentices leave Christiana before their three year apprenticeship program was complete. As it often happened, after the boys had acquired enough skill to pass as full-fledge machinists, moulders or pattern makers, they would leave in search of jobs paying a full mechanic's wage instead of the considerably lower apprentice wages. Their departure was sometimes followed by a blacklist letter, such as this one to the Cambridge Iron Co., Johnstown, Pennsylvania:

> Two of our apprentice boys from machine shop department asked for leave of absence for a day the latter part of last week, and have not since put in an appearance, and we learn they have succeeded in getting a job in your town, whether with your Co., we are not advised. In case they are with you, we wish to say one of them Elsj. (sic) Clark, is in the latter part of his first year and the other Winfield Mowrer in third year and neither of them as you will readily discover are very apt workmen and we don't want that you should be imposed upon by them trying to pass for finished mechanics. And it would be a favor to us if you would refuse them employment.[46]

Little real importance can be attached to this sort of behavior for two reasons: first, it was not characteristic of the Broomells' general attitude towards or behavior with their employees; and second, blacklist letters in an industry using skilled labor, with individual firms facing inelatice labor supplies during normal business activities proved totally ineffective. Company records indicate that at no time did the Broomells ever acknowledge compliance with their request to deny employment to a runaway apprentice. Enforcement of a three year apprenticeship program during periods of acute shortage of skilled labor was a lost cause.

The Broomells were loath to fire anybody and company records contain only one notation to the effect that a man was fired. But even in this case, the individual could get his job back if he explained why he was moonlighting:

> We have understood from Jos. M. Orr that you have been absent from our works for the past two weeks on account of sickness. This is of course would be sufficient reason for you not working, but we learned yesterday, that you have been travelling with Brinton's wagon to sell plants. You have made a practice of doing this thing for two or three years past and you certainly should be well enough acquainted with business matters to know that this is not treating us justly, especially as we are so much behind with our foundry work all the time.
>
> We propose now to give you a chance to sell flowers for an indefinite length of time and have arranged to have a man come to take your place, and before you go to work for us again, we shall expect you to come to our office and make sufficient explanation of your conduct.[47]

In conclusion the Broomells compare very favorably with other segments of the nineteenth century business community and in many respects were ahead of their time. Although Isaac was "in off the farm" his sons were reared in a relatively prosperous middle class environment. Most probably they had a good education, compared with the national average; started working steadily about eighteen years of age; and were given positions of authority in the firm's management at an early age. Like the middle class in general, they were affected by the relative changes in their social status growing out of the rapid economic growth of the period. To compensate, they were active in the reform movements of the period, but unlike the Robber Barons' image, they brought to their business activities high ethical standards formulated in their personal lives.

NOTES

[1] This discussion is based on two articles: Frances W. Gregory and Irene D. New, "The American Industrial Elite in the 1870's: Their Social Origins," *Men in Business*, ed. William Miller, (New York: Harper & Row, 1962), pp. 191-211; William Miller, "The Recruitment of the American Business Elite," *Men in Business*, ed. William Miller (New York: Harper & Row, 1962), pp. 329-337.

[2] Isaac Broomell, "Fifty Years of Married Life," p. 2.

[3] E. G. Broomell, Copy Book 17 (n.d.), p. 16.

[4] Henry Broomell, Copy Book 18 (n.d.), p. 114.

[5] E. G. Broomell, Copy Book 19 (July 28, 1896), p. 1000.

[6] Richard Hofstadter, *The Age of Reform* (New York: Random House, Inc., 1955), pp. 131-173.

[7] They were not completely unaware of the possible ramifications upon themselves of the behavior of the larger corporate entities: "it looks now as though there is going to be a long fight on the steel combination and we do not know how much it will affect all lines of trade." E. G. Broomell, Copy Book 27 (August 5, 1901), p. 858.

[8] E. G. Broomell, Copy Book 7 (May 31, 1886), p. 870. In another letter Edward wrote: "I am sorry to persecute you with another letter, but must say the matter of assessments is not clear to me yet, and I can't help thinking I have been deceived." E. G. Broomell, Copy Book 8 (October 9, 1886), pp. 194 and 195.

[9]Richard Hofstadter, *The Age of Reform*, p. 138.

[10] E. G. Broomell, Copy Book 7 (May 18, 1886), pp. 839 and 840. Edward underlined "millenium" for emphasis.

[11] E. G. Broomell, Copy Book 15 (October 29, 1892), p. 687.

[12] *Ibid.*, (December 29, 1892), p. 864.

[13] E. G. Broomell, Copy Book 10 (November 17, 1888), p. 866. Edward underlined "saved from utter ruin" for emphasis.

[14] *Christiana Ledger*, October 17, 1891, p. 1.

[15] E. G. Broomell, Copy Book 12 (September 20, 1889), p. 107. The pledge reads as follows: "I hereby sign and pledge myself to use no intoxicating drinks of any kind, while I continue in the employ of the Christiana Machine C. and will consider myself indefinitely suspended from their service the instant I violate this obligation."

[16] E. G. Broomell, Copy Book 14 (August 25, 1891), p. 381.

[17] E. G. Broomell, Copy Book 18 (April 26, 1896), p. 972. Edward had a broken leg at the time which was an added incentive not to attend.

[18] *Christiana Ledger*, December 24, 1892, p. 1.

[19] *Christiana Ledger*, December 17, 1892, p. 1.

[20] E. G. Broomell, Copy Book 2 (March 8, 1880), pp. 280 and 281. Henry had the same sort of problems: "Nellie is not getting along very well. She took a heavy cold and has been quite sick and weak. She eats scarcely anything. The Dr. says the union of the bone is not progressing as rapidly as it should probably owing to her debilitated condition." Henry Broomell, Copy Book 3 (February 17, 1881), p. 347.

[21] E. G. Broomell, Copy Book 15 (December 3, 1892), p. 784.

[22] E. G. Broomell, Copy Book 20 (March 7, 1898), p. 543.

[23] E. G. Broomell, Copy Book 1 (September 10, 1879), p. 800.

[24] E. G. Broomell, Copy Book 10 (n.d.), pp. 367 and 368.

[25] *Ibid.*

[26] E. G. Broomell, Copy Book 14 (January 4, 1892), p. 730.

[27] E. G. Broomell, Copy Book 22 (February 4, 1899), p. 73.

[28] *Ibid.*

[29] *Ibid.*

[30] E. G. Broomell, Copy Book 1 (August 19, 1879), p. 717.

[31] E. G. Broomell, Copy Book 9 (n.d.), p. 557.

[32] *Ibid.*

[33] E. G. Broomell, Copy Book 13 (July 7, 1890), p. 95.

[34] *Ibid.*, (December 3, 1890), p. 584.

[35] *Ibid.*, (March 28, 1891), p. 904.

[36] *Ibid.*, (n.d.), p. 947.

[37] E. G. Broomell, Copy Book 14 (December 19, 1891), p. 684.

[38] *Ibid.*, (March 4, 1892), p. 969.

[39] John M. Seibert, Copy Book 10 (July 31, 1888), p. 472.

[40] E. G. Broomell, Copy Book 14 (January 18, 1892), p. 776.

[41] E. G. Broomell, Copy Book 12 (n.d.), p. 517.

[42] E. G. Broomell, Copy Book 17 (April 19, 1895), p. 898.

[43] E. G. Broomell, Copy Book 7 (n.d.), pp. 895 and 896.

[44] E. G. Broomell, Copy Book 18 (May 15, 1891), p. 10.

[45] *Ibid.*

[46] E. G. Broomell, Copy Book 10 (n.d.), p. 74.

[47] E. G. Broomell, Copy Book 14 (May 23, 1891), p. 57.