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AN ANALYSIS OF THE EARLY RECORD-KEEPING IN THE DUPONT  
COMPANY--1800-1818

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The Pennsylvania State University  
The Graduate School  
Department of Accounting and Management Information Systems  
College of Business Administration

An Analysis of the Early Record Keeping in the DuPont  
Company--1800-1818

A Thesis in  
Business Administration

by

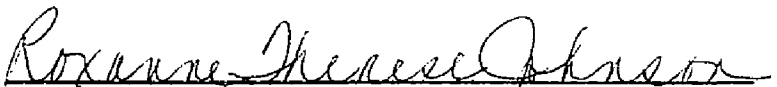
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for the Degree of

Doctor of Philosophy

May 1987

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## ABSTRACT

The purpose of this research is to analyze the record keeping techniques and developments evidenced in the earliest account books of a manufacturing firm, E. I. DuPont de Nemours & Company. The twentieth-century DuPont Company is well-known and respected throughout the world for the innovations and contributions it has made. At the beginning of the nineteenth century, however, the DuPont Company was a small, family-dominated gunpowder manufactory struggling for survival. The decision makers required a record keeping system which would provide information on the financial position of the firm for themselves, as well as for the shareholder-investors and creditors with financial interests in the enterprise. Usefulness was therefore the primary criterion which prompted the changes in the record keeping during the period under study.

This analysis covers the formative years of the company's record keeping, 1800 to 1818. Systematic procedures were essentially in place by August 1818. In the course of my research, I examined the earliest extant record books for the DuPont Company, as well as selected secondary materials valuable to the verification of the

information recorded in the entries in the various account books.

Although the record keeping techniques used in this firm cannot be generalized to apply to any other firms of the period, they played an important role in the company's survival and ultimate success. The usefulness criterion that caused record keepers to adapt existing procedures to meet specific needs by using double-entry bookkeeping fostered a valuable set of record keeping guidelines in this firm that ensured the success of the company into the following century.

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## PREFACE

I decided to research a topic for my thesis in the field of accounting history. I have always been interested in the past, as evidenced by my first undergraduate degree in history, and I was very pleased to be able to combine my two interests. I was particularly intrigued by the firm E. I. DuPont de Nemours & Company. Today this company is well-known and respected throughout the world for the innovations and contributions it has made. This is nowhere more evident than in the small state of Delaware where the DuPont influence is pervasive. I have been a resident of Delaware since 1965, and am intrigued by the differences between the firm we know today and the early firm located along the Brandywine River in what is now Greenville, Delaware.

I first learned about the DuPont Company's origins in gunpowder manufacture during a tour of a DuPont family legacy, the Hagley Museum. The museum, located at the site of the original DuPont gunpowder works, depicted manufacturing life along the Brandywine River in the nineteenth century using scrupulously reproduced exhibits and renovated buildings. In keeping with my accounting background, however, I was interested in far more than the technological history of the DuPont Company. I



specifically wanted to study the bookkeeping techniques and developments evidenced in the early business records of a manufacturing firm which has survived for almost two centuries.

I was indeed fortunate to receive the necessary support from my thesis committee for my choice of subject. I have selected the formative years of the company's record keeping, 1800 to 1818, for my records analysis. Systematic procedures were essentially in place by August 1818. Sufficient material exists for the reflected period to support and warrant thesis quality research. Material available for subsequent years will afford the opportunity for future research on this subject.

The first step in my research was a literature review of prior and current research on these materials. Remarkably little work on this period, let alone these records, exists. There is one unpublished Master's Thesis on the subject of the DuPont bookkeeping practices of this early period.<sup>1</sup> The author, Nina Edwards, dealt with the bookkeeping system from an historical perspective, however, as opposed to analyzing in detail the significance of the trends, techniques and developments evident in the record keeping. Her work was a valuable resource for individuals with little or no knowledge of bookkeeping but it failed to address the significance of the records in terms of the history of accounting. The opportunity for uncharted

research on these records was, surprisingly, still available.

As part of my research, I wanted to examine the earliest primary materials for the DuPont Company. I was granted access to all the extant records of the period under study which are preserved at the Hagley Library, another DuPont legacy.<sup>2</sup> I verified the integrity of the materials used in this study with the assistance of the Hagley Library's bindery expert, Mr. David Moore.

I also used certain secondary materials to support my research.<sup>3</sup> The secondary source of most value was an eleven-volume set of family letters entitled Life of Eleuthère Irenée du Pont from Contemporary Correspondence, 1778-1834, translated into English by Bessie Gardner DuPont.<sup>4</sup> Another valuable source was a Guide to Manuscripts in the Eleutherian Mills Historical Library.<sup>5</sup> This volume helped me to identify other materials which might have some bearing on my research. In addition I accessed late eighteenth-century contemporary works on record keeping to enhance my understanding of the bookkeeping practices of the time.<sup>6</sup>

I would like to express my heartfelt appreciation to my parents and friends without whose continued support and encouragement the completion of this research would not have been possible. In addition, the Hagley Library's

Research and Reference Department and the Accessions Department provided invaluable assistance in this research.

It is my hypothesis that usefulness was the primary criterion which prompted the changes that occurred in the bookkeeping techniques used by the DuPont Company during the period under study. Even when the bookkeeping techniques used evidenced the education, background and experience of particular record keepers, the criterion which made the practice of double-entry bookkeeping the system of choice since the Middle Ages still applied.

## Notes--Preface

- 1 Nina Lorraine Edwards, "The Bookkeeping Records and Methods of E. I. DuPont de Nemours and Company, 1801-1834" (M.A. thesis, University of Western Ontario, 1966).
- 2 The account books for the period are catalogued within the Hagley Library's Accession 500, entitled "Records of E. I. Du Pont de Nemours & Co., 1801-1902." The examination of the account books was facilitated by a guide to the Library's company manuscripts, the "Schedule of the Records of E. I. DuPont de Nemours & Co., 1802-1902," prepared by the Manuscripts Department of the Eleutherian Mills Historical Library (now Hagley Library) and dated January 1, 1965.
- 3 The general works referenced are indicated below, although other materials were accessed and cited as necessary.
- 4 Bessie Gardner DuPont, trans. and ed., Life of Eleuthère Irénée from Contemporary Correspondence, 1778-1834, 12 vols. (Newark, Delaware: University of Delaware Press, 1923-1926). The translations in these volumes are generally considered accurate in terms of content. Some specific translations are glaringly inaccurate, however, and where these have resulted in misleading information I have verified the true meaning of the terms in question. For the purposes of this research most general descriptions are taken verbatim from B. G. DuPont's work unless otherwise indicated.
- 5 John Beverley Riggs, A Guide to the Manuscripts in the Eleutherian Mills Historical Library, (Greenville, Delaware: Eleutherian Mills Historical Library, 1970) (hereafter cited as Riggs, Guide).
- 6 I did not consider an exhaustive review of contemporary works on bookkeeping necessary for this analysis, but rather concentrated on a limited number of works with many published editions, specifically Thomas Dillworth, The Young Book-keeper's Assistant, 12th ed. (Philadelphia: Benjamin Johnson, 1794) (hereafter cited as Dillworth, Assistant) and John Mair,

Book-keeping Moderniz'd, 6th ed. (Edinburgh: Bell & Bradfute, 1793; reprint ed., New York: Arno Press, 1978) (hereafter cited as Mair, Moderniz'd). Mair also had numerous previous editions under another title. I considered these works representative of techniques practiced at this time. Direct quotations from these works have been altered as necessary in accordance with current spelling practice for purposes of clarity. Thus, the nineteenth-century practice of substituting the letter "f" for one of the consonants "s" in such words as omission (thus, omifision) will appear in its current form (thus, omission).

## INTRODUCTION

The purpose of this research is to analyze the record keeping techniques and developments evidenced in the DuPont Company account books during the early nineteenth century. Essential to such an analysis is a thorough understanding of the history of the company for which such records were maintained, E. I. DuPont de Nemours & Company. As it usually is in family-dominated firms, the history of the company is inextricably tied to the history of the family. The DuPont family emigrated to the United States from France in 1799. The patriarch of the family, Pierre Samuel DuPont de Nemours, engineered the emigration.<sup>1</sup>

Pierre Samuel DuPont was born December 14, 1739, in Paris to Samuel DuPont and Anne Alexandrine de Montchanin. Pierre enjoyed only a brief formal education during his early years before Samuel, a watchmaker, forced his son to learn his trade. Although Pierre eventually mastered his father's occupation, he never liked it and refused to make it his life's work.

Instead, Pierre chose to pursue his own course with the hope, eventually, of securing a responsible position in government. Early in life he developed a number of personal characteristics which served him well in this

effort. He became an extremely self-motivated individual with diverse interests and a great deal of curiosity. He combined these attributes with almost obstinate self-confidence and fortitude that occasionally resulted in stubborn, unyielding resolve. Nonetheless he enjoyed and welcomed new experiences and opportunities, and was remarkably undeterred by events of the past. He therefore eagerly and capably continued his education on his own despite the lack of additional formal training.

In his pursuit of knowledge and a government position, Pierre developed a moderate approach to issues that interested him. His ideas were compatible with those of the Physiocrats, moderate reformers who believed that land was the only source of wealth and agriculture the basis of a healthy society. This was the first organized group to recognize his potential. He attracted the attention of leading members of the movement, specifically François Quesnay, personal physician to King Louis XV's mistress, Mme de Pompadour. Pierre so impressed Quesnay that the doctor encouraged him to do some work on another important issue, the free importation and exportation of grain. His work in this area favorably encouraged his supporters, and helped to secure his reputation as a dedicated and tireless worker.

From 1763 to 1774 Pierre had no stable occupation or income. He took many different jobs during this period,

relying on whatever sporadic employment opportunities he could find to earn a living. He eventually assumed his first official government position as Inspector General of Commerce in September 1774 at the instigation of Anne Robert Jacques Turgot, another renowned moderate reformer. This did not long precede the development of early events leading to the most turbulent period in French political history, the French Revolution. Consequently on May 4, 1789, the first meeting since 1615 of the Estates General, a representative body summoned only in times of great trial, convened in Paris. This gathering soon converted itself into the Constituent Assembly. Pierre attended the meeting as one of two delegates elected to represent the county of Nemours. He became a well-known figure in the Assembly because of his detailed and exhaustive work on several committees. He had played a relatively insignificant part in earlier events but he was too outspoken to remain in the background forever. Nonetheless, politically and economically he maintained his moderate perspective, and refused to follow the more extreme elements within the Assembly. This attitude brought him into conflict with the more adamant reformers of the period, although he still managed to retain the respect of many of the delegates at the Assembly and therefore continued to contribute to and participate in events.



Over time public opinion and prudence forced Pierre to relinquish all his government subsidies and positions, although any income he received for his services was sporadic and unreliable. In an effort to augment his diminished resources he started a print shop, apparently not long before the Constituent Assembly disbanded in 1791.<sup>2</sup> He had learned the printing profession in one of his former positions as editor of a journal. In his capacity as head of the printing office he edited and published the writings of others, and still contributed his own work as well. Indeed, he used this forum to continue to criticize and attack the extremist factions which dominated the government.

In the process Pierre particularly alienated the Jacobins who assumed control of the government in July 1793. False accusations brought before the dominant Jacobin group concerned Pierre's alleged involvement in active opposition to the revolutionary cause. Although he had limited his opposition to demands for moderation this group still considered him a threat. Finally in July 1794 the Committee of Public Safety, by now dominated by Robespierre, ordered his arrest. He was taken to the prison La Force in Paris and was scheduled to die. The fall of Robespierre on July 27, 1794, spared his life.

After this, Pierre essentially withdrew from the political mainstream and concentrated his efforts on the

print shop. He resumed his political career in late October 1795 when the government of the Directory took control. Pierre sat in one of the two chambers of the new legislature, the Council of Elders. Executive power rested with the five-member Directory selected by the Council of Elders from a list submitted by the other legislative chamber, the Council of the Five Hundred. Pierre's moderate philosophy again placed him at odds with the extremist elements prevailing in the government.

In 1797 France experienced further political upheaval and unrest. Country-wide elections beginning in April of that year resulted in bitter and violent contests and a massive turnover in the government. On September 4, 1797, three of the Directors, who believed that the royalists would attempt to take advantage of the confusion and regain political control, initiated a coup d'état. The Directors next moved to arrest perceived enemies among the rest of the Directory and the two Councils. Pierre and one of his sons were among those arrested, but both were released within twenty-four hours. Pierre's moderate stance had placed him in jeopardy again, however. Pierre officially resigned from the Council of Elders soon after this incident, on September 13, 1797.

Domestically as well as politically Pierre faced many trials, tribulations and successes. On January 28, 1766, he married Nicole-Charlotte-Marie-Louise Le Dee de Raucourt

and started a family despite his straitened economic circumstances during this period. His first son, Victor, was born in October 1767. His wife gave birth to a third son (the second had died) named Eleuthère Irénée in June 1771. Fifteen years after the birth of her last child, in 1784, she suddenly died. Up to this point, she had essentially complete responsibility for the domestic side of Pierre's life. Following her death, Pierre had to assume the management of the family estate, Bois des Fossés, and responsibility for the two children. He did not remarry until September 26, 1795. His second wife was Françoise Poivre, the widow of one of his friends.

Pierre's two sons could not have been more unlike each other. Victor, the elder son, was something of a dandy. His early letters to his brother were filled with missives and requests concerning his attire. They were also filled with wit, satire and criticism, usually aimed at his brother's more earnest existence and occasional remissness.<sup>3</sup> These qualities may have been fostered in large measure because Victor, seventeen when his mother died, did not have to endure the brunt of his father's interminable direction. Pierre strongly disapproved of Victor's attitudes, interests and evident lack of ambition, and was strongly disappointed by his elder son.<sup>4</sup>

Despite his father's impression of him, Victor eventually decided to pursue a career in foreign service, a

profession suiting his heretofore unappreciated qualities. He launched his career in 1788 when he found an unpaid position with the French envoy to the United States. This apparently resulted in two diplomatic missions to the new country, the second ending in the summer of 1793. In early 1794 Victor married Josephine Gabrielle La Fite de Pelleport. Following the marriage, he secured a position with the Bureau of Foreign Relations, and later returned to America as the first secretary of the French legation. Sometime in 1798 he learned of a vacancy in the consular seat in Charleston, South Carolina, which he obtained. Unfortunately, relations between France and the United States were strained and he could not fill his post. Nonetheless, he still planned to continue in foreign service and appeared to have a successful career ahead of him.

Pierre's second son, Eleuthère Irénée (hereafter E. I.), was very different from his brother, and did not seem to have Victor's frivolous nature. Only thirteen when his mother died, he grew up under his father's rather taxing supervision. Pierre's letters to his son are filled with exhortations to work hard and long, maintain an even temperament, and remain obedient to his father's wishes.<sup>5</sup> Pierre essentially groomed E. I. to be the kind of son he wanted--responsible, resolute, serious and hardworking, the exact opposite of what Pierré perceived Victor to be.

E. I. expressed an early interest in the manufacture of gunpowder.<sup>6</sup> This apparently influenced, or possibly predetermined, his career path. He benefited from his father's friendship with a highly respected individual, Antoine Laurent Lavoisier, the world-renowned chemist. Pierre met Lavoisier when both were members of a special government committee formed to investigate agricultural problems. Lavoisier managed the government's gunpowder ministry, the Administration of Powder and Saltpetre located at the Paris Arsenal. Sometime in late 1788 or early 1789 E. I. became a management apprentice at the Administration, and enjoyed a widely diverse, scientifically oriented education both at the Arsenal and at a gunpowder mill located outside of Paris at Essonne. During his course of study, he specifically learned how to manage a gunpowder manufactory.

While still at the Administration, E. I. married Sophie Dalmas on November 26, 1791, despite formidable initial opposition from his father. His own arguments in favor of the marriage focused on his position at the Administration and the likelihood of advancement. He finally won Pierre over, but unfortunately he lost his position shortly thereafter, in 1792, when Lavoisier resigned from the Administration and left the arsenal.<sup>7</sup>

E. I. subsequently joined his father in the management of the printing office. He became the primary manager of

the firm whenever Pierre's duties, responsibilities or occasional need to flee Paris as a fugitive left him in charge. During this period, therefore, he also received valuable management training. When Pierre was arrested the second time, E. I. was also taken into custody.

It is not clear exactly when Pierre formulated his intention to leave France.<sup>8</sup> His arrests certainly served to warn him that he, as well as members of his immediate family, would not be safe as long as they remained in France. Following his resignation from the Council of Elders, Pierre and his family spent the remainder of their time in France preparing for the journey to America.

As mentioned, Pierre occasionally overstepped his capabilities, took unnecessary chances, and tended to leap into situations without adequate preparation or forethought. Nowhere was this more evident than when he engineered the family's emigration to America. For the family to emigrate, they had to have some means of making a living once they arrived in America; since the ~~DuPonts~~ were not wealthy. To accomplish this, Pierre devised a plan for a family business that he hoped to finance before he left France. Perhaps because of his physiocratic background, he became interested in a business which in some way involved land management and development.

In a 1797 prospectus directed at potential investors Pierre outlined an ambitious plan for the firm, DuPont de

Nemours Father, Sons & Company. He specifically proposed that the firm engage in land speculation, management of an agricultural community and associated commercial enterprises, and a commission business. Pierre estimated that the firm's capitalization requirements were such that they would have to sell "at least two hundred shares of ten thousand francs each and . . . not . . . more than four hundred."<sup>9</sup> The principals of the firm were identified in the prospectus as "Citizen du Pont de Nemours, . . . Citizen Bureaux de Pusy, an expert engineer, . . . Citizen du Pont, junior, French consul at Philadelphia; and his brother Irénée du Pont, a business man."<sup>10</sup>

Pierre's two sons participated in his new venture, although their reasons for doing so differed considerably. Victor apparently had no alternative other than to become a principal in the new firm. He returned from America in July of 1798 to find himself already named in the new firm's prospectus. He was unable to extricate himself from the proceedings, largely because of his sense of family responsibility, although it appears that he really wanted to remain in the foreign service.<sup>11</sup>

E. I., on the other hand, continued to manage the print shop. This took all of his time, and despite his efforts the business suffered as conditions worsened in France. E. I.'s letters to his wife during this time are full of remorse and despair at their continued forced separation as

he toiled in Paris and she at the family estate. The situation worsened when even the mails became less certain and less timely.<sup>12</sup> For these reasons, E. I., as well as his family, probably welcomed the proposed move.

One point to keep in mind when considering the decisions and expectations of the DuPonts at this time is that Pierre never sought either guidance or background information for his plans from sources more familiar with conditions in America. He apparently never sought his son Victor's advice, since Victor returned from America to discover the situation. Nor did he consult with another individual who could have been of even greater service in advising him, his old friend, Thomas Jefferson. Pierre's willfulness meant the family embarked on this enterprise without adequate knowledge of conditions and opportunities in the United States.

Two years after the 1797 prospectus, when Pierre was finally ready to move to America, he had received only about one-fourth of the amount he had initially calculated as the minimum needed to begin operations. The firm Du Pont de Nemours Father, Sons & Company was therefore seriously under-capitalized from the very beginning.<sup>13</sup> Nonetheless, Pierre and the family members travelling with him arrived in the United States at the turn of the century.<sup>14</sup> Despite the firm's straitened circumstances, Pierre still believed it would be successful.



At some point Pierre determined that he should not advertise the land speculation aspect of the business immediately in case such information limited the firm's opportunities.<sup>15</sup> He planned to use this subterfuge only until he had investigated the land speculation opportunities which existed. An undated circular with the address, "New-York," therefore detailed the extent of the proposed commission business only.<sup>16</sup>

It was just as well, since within a year Pierre himself recognized the inadvisability of his original intentions for the firm, and even expressed thanks that he had not been able to invest in the schemes proposed to him upon his arrival.<sup>17</sup> He also faced the fact that the fledgling commission business had not attracted the clients in America he had expected.<sup>18</sup> In late 1800, therefore, Pierre outlined eight plans which covered new opportunities he hoped the firm would be able to exploit. He detailed his two sons to carry his ideas back to France.<sup>19</sup>

Victor's objectives when he returned to France were to acquaint the existing investors with the change in focus for the venture, to give the reasons for that change, and to reassure them as to the viability of the firm. He was also to seek additional investors, if possible. In addition, although he was not specifically charged with activation of a particular plan, he began negotiations

which ultimately involved the firm in a scheme to supply French ships stationed in Santo Domingo.

Of the eight plans, Pierre gave E. I. responsibility for the eighth--to establish a gunpowder manufactory. E. I. had spent considerable time convincing his father to support his project. Pierre, in a letter to his chief backer, stated that E. I.'s "skill in this art, the ignorance of it in America, the needs of Government, those of the Country and even of the Spanish Indies, gives us not hope but a positive certainty of great profits."<sup>20</sup> Pierre's statement was accurate. Both domestic and imported powder were of low quality and poorly manufactured. E. I. was right in his analysis of the market potential for a high quality, competitive product.<sup>21</sup> Nonetheless, his expectations and plans were somewhat optimistic in many ways.

E. I. estimated that it would cost \$36,000 to build, man and begin operating the kind of gunpowder manufactory he envisioned.<sup>22</sup> He expected this amount to buy the optimal location and buildings he considered essential for the kind of high quality operation he planned.<sup>23</sup> In addition to the lands and buildings, he also needed personnel, raw materials and equipment to successfully begin operations. He went to France to raise the necessary funds to finance his undertaking, and procure the personnel and equipment he needed to operate his manufactory. While

he was in France, he renewed his acquaintance with the members of the French Gunpowder Ministry in Essonne, and updated his knowledge of manufacturing techniques and equipment. He also purchased advanced equipment that made his firm capable of state of the art gunpowder manufacturing.<sup>24</sup> While he was in France, the "Deed of Association" for E. I. DuPont de Nemours & Company which identified the particulars of the gunpowder manufactory, the shareholders, and operational expectations, was drafted in Paris on April 21, 1801.<sup>25</sup> At this point, the manufactory existed on paper only.

After E. I. convinced his father to support the gunpowder manufactory, Pierre made little contribution to the enterprise. In fact, on May 1, 1802, the firm DuPont de Nemours Father, Sons & Company officially established the business in Paris, and ceased operations in the United States. The American commission business, such as it was, was turned over to a new firm managed by Victor and called Victor DuPont de Nemours & Company.<sup>26</sup> The latter firm soon became a casualty of Victor's efforts to arrange to finance French ships in the Caribbean on behalf of the French government. The arrangement he engineered with the French had never resulted in a signed agreement, and the results were ultimately disastrous for his firm. Pierre's firm, the "parent company" to the gunpowder manufactory, was dissolved on May 20, 1811.<sup>27</sup> As events developed,

E. I. consequently became the Director of the only successful DuPont family endeavor, E. I. DuPont de Nemours & Company, able to guarantee the future prosperity of the family.

Eventually the company would come to dominate the gunpowder industry; but in the early years of the manufactory's existence, E. I. found himself in grave financial trouble over and over again. The record books used to document the early operations of the gunpowder manufactory chronicle this struggle. The fact that the firm survived this period in American economic history at all is important. The record keeping practices used, although they cannot be considered generally applicable to other firms of the period, do shed light on the motivating factors which caused changes in the procedures used.

## Notes--Introduction

- 1 The following account of the history of the family, except where otherwise indicated, is based on the excellent account by Ambrose Saricks, Pierre Samuel Du Pont de Nemours (Lawrence, Kansas: The University of Kansas Press, 1965), pp. 1-272 (hereafter cited as Saricks, de Nemours).
- 2 He published a prospectus on the printing office in June 1791. "Printing Office of du Pont Deputy from Nemours to the National Assembly", June 8, 1791. Bessie Gardner DuPont, Life of Eleuthère Irénée duPont from Contemporary Correspondence, 1778-1834, trans. and ed. B. G. DuPont, 12 vols. (Newark, Delaware: University of Delaware Press, 1923-1926) (hereafter cited as DuPont, Life), I:141. The above heading has been translated by this researcher from French. In some instances B. G. DuPont has not recorded the translation of some part of a document. Where B. G. DuPont has retained the original French, this researcher has recorded the appropriate translation.
- 3 For examples of such letters, see Victor DuPont to E. I. DuPont, December 18 & 26, 1786, and January 3 & 12, 1787. DuPont, Life, I:64-72.
- 4 This was made clear in a letter. P. S. DuPont to E. I. DuPont, July 19, 1786. DuPont, Life, I:45-6.
- 5 P. S. DuPont to E. I. DuPont, July 19, 1786. DuPont, Life, I:45-6.
- 6 Pierre referred to this interest in a letter. P. S. DuPont to E. I. DuPont, March 22, 1785. DuPont, Life, I:33.
- 7 For details of Lavoisier's career with the Administration see Sidney J. French, Torch and Crucible (Princeton: Princeton University Press, 1941); Douglas McKie, Antoine Lavoisier: Scientist, Economist, Social Reformer (New York: Henry Schuman, 1952); and Henry Guerlac, Antoine-Laurent Lavoisier (New York: Charles Scribner's Sons, 1975).

- 8 The DuPont Family emigrated to the United States from France in 1799. The extant letters of the family do not specifically identify the time when Pierre determined to emigrate to the United States. The earliest reference to the proposed move appears on September 27, 1797, in a letter from E. I. to his wife in which he refers to "the business that we have planned" and discusses what he has learned from a Colonel Fulton about America because "he has very lately come from Kentucky and knows all the details of just such enterprises." E. I. DuPont to Sophie DuPont, September 27, 1797. DuPont, Life, IV:68. The enterprise he was referring to was his father's proposed commission and land management business in America.
- 9 In a prospectus endorsed "Project of a Rural Society--1797", Pierre outlined his plans and expectations for the enterprise. The outline went on to describe in detail the proposed locations and nature of the various firm components as well as the time frame within which development and progress should occur. At the end of the outline seventeen separate articles detailed the particulars of the firm's management, distribution of dividends and capital, and other matters particular to the firm's existence. The proposed life of the company was to be twelve years. "Outline of a Plan for an Agriculture and Commercial Establishment in the United States of America." DuPont, Life, IV:86-100.
- 10 Citizen du Pont de Nemours was Pierre Samuel duPont; Citizen du Pont, junior was Victor. Pierre emphasized his previous time in the United States. Citizen Irénée du Pont was the younger son of Pierre. DuPont, Life, IV:87-88. Citizen Bureaux de Pusy was his second wife's son-in-law. De Pusy had been a prisoner in Austria with Lafayette until 1797. Saricks, de Nemours, p. 233.
- 11 B. G. DuPont translated a section of Mrs. Victor DuPont's reminiscences where Victor's wife discussed her husband's preferences. "Our Transplantation to America." DuPont, Life, IV:119-120.
- 12 Letters passing between E. I. and his wife, Sophie, chronicle this situation. E. I. DuPont to Sophie DuPont. DuPont, Life, III, IV, V.
- 13 In an undated manuscript drafted prior to the family's emigration Pierre discussed the "Present Status of our Project." At this point he indicated that "We have had

subscriptions or promises either verbal or written for more than three hundred shares sold or reserved." Unfortunately little of this was actually realized. He described the capital investment for the firm in four "chapters." The first Chapter was called "Payments already made" and included investment in terms of land and money or bills of exchange; the second "Payments that will surely be made;" the third "Still to be hoped for, but less sure;" and the fourth "Possibilities." A fifth chapter he called "What is to be done." "Present Status of our Project." DuPont, Life, V:99-109. Despite Pierre's expectations, the firm received no other promises or active investment beyond that received prior to the family's removal to America. Immediately prior to the move E. I. disposed of the printing shop and its equipment. Nonetheless, the family had few resources to draw on. E. I. DuPont to Sophie DuPont, May 21, 1799. DuPont, Life, IV:341.

- 14 The family actually arrived in two groups. The first group consisted of Pierre's wife and her son-in-law who were sent earlier to arrange for living quarters and make other necessary preparations for the arrival of the rest of the family.
- 15 In the undated manuscript entitled "Present Status of Our Project" under Chapter 5, "What is to be done", Pierre acknowledged "It is better therefore that we should announce ourselves as doing only a shipping business on commission, and that we should offer to refer purchases of land to our friends in Europe, so that we will have plenty of time for investigation. While we are investigating and deciding on our definite plans, we should increase our capital by doing a commission business which will require but a small part of our capital and give us an immediate profit." "Present Status of Our Project." DuPont, Life, V:107-108.
- 16 The circular stipulated that the firm would arrange for "paying or receiving accounts, storing merchandise, exchange and proper economy." Other pursuits would include collecting and forwarding "dividends or payments due from Congress on its various loans," arranging "investments or reinvestments that Europeans may want to make in this country," enforcing "the payment of sums due to Europeans, either by the State or by individuals," and directing "the administration of estates owned in this country by Europeans." Untitled. DuPont, Life, V:117-119.

- 17 He expressed these sentiments in a letter to his chief backer. P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:167. It is not clear exactly when Pierre realized the inadvisability of his original intentions for the firm, at least for the immediate future. It is possible that the aforementioned circular veiled his intentions to investigate the opportunities in the New World before advertising the true nature of the firm. In this case the commission business served, as initially intended, to occupy and finance the firm only until the initial objectives were met. It is also possible that Pierre had already begun to revise his original intentions with respect to the firm because despite his expectations land speculation in the United States had reached its peak and the opportunities Pierre originally envisioned for the firm were essentially nonexistent. Thomas Jefferson, for instance, when he finally learned the true nature of the DuPont enterprise, advised strongly against the effort.
- 18 This may be because of a fear and distrust of foreigners by Americans.
- 19 Pierre outlined his eight plans in a letter to his major backer. P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:163-196.
- 20 P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:191-192.
- 21 E. I. outlined his expectations in an undated critique entitled "On the Manufacture of War and Sporting Powder in the United States." He indicated that "the high price of labor, and that of raw materials which is the natural consequence, have caused till now small success in the manufactures of the United States. But a manufacture in which nearly all the work is done by machinery, which would use foreign raw material, and which for those reasons could not feel the effects of the high price of national industries, would be sure of complete success. It would also gain, to assure its profits, the cost of transportation and the commercial charges now paid by European manufacturers. The manufacture of gunpowder has all these advantages; the cost of labor, even in America, is not one sixth of its price, and saltpetre, the only raw material in its composition of which the cost is important, comes from India at as low a price as is paid for it by European manufacturers. A manufacture of this kind has therefore nothing to fear from the obstacles which will for a long time hinder the introduction of other



manufactures into the United States. It can count on a high price and a sure market for its product. The supplying of the Government for the Navy, for the Army, and for the Forts which are now nearly empty; the consumption of a race of hunters living largely in the forests; the commerce of the West Indies and that of the Indians offer to it outlets twenty times greater than would be necessary for the most brilliant success." In addition, "the Government cannot depend on foreign countries to supply powder for the forts, for the artillery, for the Navy, it must have a manufacture established in America and will doubtless give all necessary encouragement to such an enterprise." He also noted that "there are already in the United States two or three plants that make bad powder at great expense and that nevertheless do a good business." "On the manufacture of War and Sporting Powder in the United States," undated. DuPont, Life, V:198-205.

- 22 See appendix B for a detailed list of these proposed costs.
- 23 E. I. detailed the location and buildings he needed in an undated proposal. "The Locations and Constructions Necessary for Manufacture of Gunpowder," undated. DuPont, Life, V:206-212.
- 24 In a copy of a record of E. I.'s expenses in Paris are entries for equipment purchased from the Arsenal. DuPont, Life, V:213. Bottée, Superintendant of Powder and Saltpetre to E. I. DuPont, April 15, 1802. DuPont, Life, VI:15-18.
- 25 A translation of the original Deed of Association can be found in appendix A.
- 26 An untitled notice dated May 1, 1802 detailed these events. DuPont, Life, VI:41-2.
- 27 The date of the dissolution was referenced in later correspondence. Auguste de Staël to E. I. DuPont, March 1, 1813. DuPont, Life, IX:90.

## Chapter One

### THE BOOKS AND THE BOOKKEEPERS

Modern day business organizations are made up of people--owners, managers, employees and, peripherally but essentially, creditors. The same personnel requirements existed for nineteenth-century enterprises. Then, as now, all of these people rightfully demanded information concerning some aspect of the firm's operations. They essentially placed certain reporting or disclosure requirements upon the firm.<sup>1</sup> The employees needed to know their outstanding wages, or the amount of any debts they owed to the firm; creditors wanted assurances as to the viability of the firm; managers needed to track the day-to-day operations of the firm; and the owners required information on their investments. The requirement for specific information placed demands on an enterprise for a systematic documentation of events. Since no designated authority in the nineteenth century mandated the record keeping procedures to be followed by a particular firm, responses to these information demands depended entirely upon the individuals responsible for the documentation process, their perceptions of the needs of the organization, and how they chose to translate those perceived needs into pragmatic record keeping. In turn,

the sophistication of the documentation process depended upon the background of all of the individuals actually involved in the determination of specific record keeping requirements.

This group included the designated bookkeeper for the firm, if there was one. No educational or experiential prerequisites existed for the position, however. Thus, in addition to or in the absence of an experienced bookkeeper other decision makers, probably the owners and/or the managers of the firm, influenced, dictated, or even assumed the record keeping responsibilities for the firm. Their backgrounds may or may not have included formal education or experience in the practice of bookkeeping. Absent conclusive evidence, it was also plausible that familiarity with systematic record keeping techniques may have been a routine, albeit informal, aspect of a nineteenth-century individual's background. In any event, there were numerous contemporary books on the practice of bookkeeping which would be of assistance even to an individual with no training at all.<sup>2</sup> No matter how much bookkeeping experience or training these record keepers had, however, they needed to employ record keeping techniques which were adapted to the specific requirements of the firm under consideration.

Many different individuals served the DuPont Company in the capacity of record keeper during the period in

question. These bookkeepers documented the daily events which affected the company in numerous account books.<sup>3</sup> Initially, the account books were merely rudimentary listings of events because the earliest record keepers were apparently not trained as bookkeepers. Over time, however, the record keeping became more sophisticated as individuals with more knowledge and experience assumed the responsibilities of the primary record keeper.<sup>4</sup>

Article Four of the original Deed of Association which formed the DuPont Company identified the namesake of the firm, Eleuthère Irenée DuPont, as the primary manager for the enterprise. In addition, Article Eleven stipulated that the "Director of the manufactory will adopt for his accounts the principles adopted by the Administration of Powder & Saltpetre of France."<sup>5</sup> E. I.'s background and experience in the making of gunpowder established him as the obvious choice to direct the operations of the firm, but his influence on the overall record keeping was difficult to establish. Even though his position as Director made him the primary decision maker for the company, his abilities in the practice of bookkeeping were suspect.<sup>6</sup> Neither do his contributions to the record keeping of the firm provide any evidence of his capabilities in this area. He did not function as the primary record keeper of the firm nor set up the original

books, but only maintained one of the supporting account books.<sup>7</sup>

Instead, the primary responsibility for the earliest DuPont Company record keeping fell initially to Peter Bauduy. He was born Pierre de Bauduy de Bellevue in France in June 1769. He left school at seventeen, joined the French army, and remained in France until his father summoned him to the family home, by now in Santo Domingo, when the French Revolution threatened. He remained in Santo Domingo until the slave rebellion there forced him to flee the troubled island in September 1791. In October he and his wife landed in Philadelphia, and soon settled in Wilmington, Delaware with other French emigrants.<sup>8</sup>

Peter Bauduy was an ambitious and enterprising individual who made many contacts in the area. He also had some capital at his disposal for investment purposes. His ability to arrange credit for the new DuPont Company along with his own investment capital attracted E. I.'s attention when he was seeking funding for his firm. Despite initial differences Peter Bauduy became a partner in the DuPont Company on August 25, 1802.<sup>9</sup> Bauduy apparently assumed the record keeping responsibilities at about this time.<sup>10</sup> From all indications he was not an experienced bookkeeper, and his efforts by themselves did not produce significant improvements in the record keeping for the firm. He

nonetheless continued as principal record keeper until February 11, 1806, when a far more experienced individual, Raphael Duplanty, replaced him.<sup>11</sup> Peter Bauduy remained a partner in the firm, however, and continued his association with the DuPont Company. He also continued to perform some of the record keeping duties.<sup>12</sup>

Raphael Defredat Duplanty was born in 1776 in Brittany. Not much is known of his early life, although he did spend some time in England as a refugee from the French Revolution after his father and two brothers were guillotined. From there, he made his way to the West Indies, possibly to Santo Domingo. In 1803 he arrived in New York, and was introduced to Victor DuPont by the Consul there.<sup>13</sup> He became involved in business in New York and at least part of the time worked for Victor.<sup>14</sup> In any event, in late 1805 DuPlanty accompanied Victor to Wilmington and eventually agreed to take over the record keeping for the DuPont Company.<sup>15</sup> He seems to have spent some time reviewing the records before he assumed control.

When Raphael Duplanty assumed primary responsibility for the record keeping functions of the DuPont Company on February 11, 1806, the accounts were in a sorry muddle. Peter Bauduy had only initiated one principal account book. This first volume included a rough day-to-day record of events affecting the firm beginning with the shareholder investments.<sup>16</sup> Not only were the earliest entries in the

volume documented long after they occurred, but Bauduy never carried the information he documented to any other record book for purposes of determining the firm's economic position.<sup>17</sup> Therefore, Raphael Duplanty essentially initiated a revolution in the bookkeeping techniques employed by the firm when he assumed control of the record keeping. He had a readily apparent advantage over Bauduy in that he had obviously had some experience and possibly education in the practice of the best record keeping method available, double-entry bookkeeping.<sup>18</sup>

Usefulness as a functional requirement historically supported the practice of double-entry bookkeeping first documented in 1494 by Luca Paciolo as part of a published work on algebra.<sup>19</sup> The methods Paciolo described still constituted the basis of the bookkeeping systems evidenced in nineteenth-century literature. The process had evolved somewhat, however, simply because of the changes in business practice and construct over the intervening years. The growth of the "extended firm" using distant agents to distribute goods geographically had introduced some new techniques into the literature of the day, although the basics of Paciolo's system still prevailed. Thus, in 1800, the most popular authors in contemporary bookkeeping literature continued to conform to Paciolo's basic tenets.<sup>20</sup>

Double-entry bookkeeping is a stylized, transactions-oriented method of documenting the day-to-day operations of a firm. Under this system, a chart of accounts was identified consisting of each individual or firm with whom the company does business, all items of value owned by the company, and other elements as necessary. The first type of accounts, called "personal accounts," was identified with a person's or firm's name.<sup>21</sup> The second, called "real accounts," included all raw materials inventories, real estate, and finished product inventories. The last category of "fictitious accounts" included important accounts with specific functions. Thus, the Stock, Profit and Loss and Factory accounts were imperative to an understanding of the economic position of the firm, even though no single tangible document or item of value supported the account. An important point to keep in mind is that each transaction involved at least two of these various accounts. The accounts could be from the same category or from different categories, depending on the particular transactions involved.

Each account was divided into two sides. To debit an account meant simply to place the information on the left hand side of the account. To credit the same account was to place the information on the right hand side. Each transaction was analyzed in terms of the receipt or



delivery of something of value in order to determine the Debit(s) and Credit(s). The receipt of something of value was recognized as a Debit, and the account became Debtor to some other account. The delivery of something of value constituted a Credit, and the account became Creditor by some other account. Depending on the nature of the account it could be increased or decreased by placing information on one of these sides. Thus, an inventory account was debited to increase the account, and credited to decrease the same account. A payable, on the other hand, was credited to increase or show the incurrence of a payable, and debited when the obligation was completed. Values were derived from the purchases of goods or services and the recognition of promises to pay or deliver.

When Duplanty introduced double-entry bookkeeping techniques into the DuPont Company record books, he accomplished this metamorphosis only after spending considerable time reviewing, correcting and augmenting Bauduy's efforts. He incorporated the information Bauduy had documented into his more sophisticated system with some difficulty. He encountered difficulty because he had to annotate existing account books and create other essential volumes in order to institute the double-entry system. In the process, he established the intricate interrelationships between the record books indicative of the double-entry bookkeeping system.<sup>23</sup> From the record

keeping perspective, this was the event of most significant benefit to the firm. Duplanty finally made it possible to understand the firm's economic position.

A general description of the interrelationships between account books for a particular firm must, of necessity, identify types or categories of account books. Individual anomalies within the record keeping system, although significant to the firm in terms of content or impact, were not representative of the overall process. The following description was limited, therefore, to DuPont's generally recognized record books.

The Manuscripts Department of the Eleutherian Mills Historical Library (now Hagley Library) previously designated the specific account books which fell within the bookkeeping categories identified. The nomenclature assigned by the personnel in the Department depended, in part, on the references in other documents to the particular volumes in question. Some volumes were not cross referenced, however. The category Blotter included many such volumes. The Manuscripts Department apparently used the term almost as a generic label to encompass a miscellaneous assortment of account books. Strict interpretation of the classification limits the number of volumes that conform to the generally recognized definition of the function of a Blotter, and therefore the term did not apply to all the volumes arranged under that label.

The entries in the volumes that actually qualified as Blotters were rough, day-to-day notations of each and every event of the day as it happened.<sup>24</sup> In many cases this rather crudely kept account book represented the book of original entry for the transactions affecting the firm. The entries were not as carefully written as those later carried to either the Waste Book or the Journal, depending on which of these was maintained, but they sometimes contained far more detail. The information in the Blotter can be traced to the appropriate Waste Book, Journal, and Ledger by correlating the entries with those in the other volumes. Since few, if any, references were made to the Blotters in other account books, some of the volumes may no longer exist. This was relatively unimportant, however, as the information in any of the missing volumes was contained in at least one of the other account books, and was often exactly duplicated by the entries in the associated Waste Book and Journal. The Manuscripts Department of the Hagley Library catalogued seven volumes as Blotters for this period but only four of these qualify under that label.<sup>25</sup>

Contemporary authors recognized the Waste Book as the first of the primary account books to be maintained by a firm.<sup>26</sup> It was the book of original entry if there was no Blotter for the period. If a Blotter existed, the information it contained was transferred to the appropriate

Waste Book. The information in the Waste Book was then transferred to the appropriate Journal. I will use the term "posting" or "post" to indicate this transfer of information. The entries might not be exact duplicates because efforts appear to have been made to organize the material better, or even combine or disaggregate some of the entries as they were posted from the Waste Book to the Journal. The Waste Book was maintained in a general Journal entry format. The information was entered following a heading designating the account names involved in the event.<sup>27</sup> The Waste Book entries were not annotated in any definite way to indicate posting to the appropriate Journal or Ledger. Sporadic marks on or next to the entries might have been efforts to document or verify the posting process, however. There were two existing Waste Books which cover the period under discussion.<sup>28</sup>

The Journals duplicated the information in the Waste Books except that the entries were annotated with the folio number of the specific account locations in the Ledger.<sup>29</sup> Each Journal entry was complete unto itself, and contained all the information necessary to post the entry to the Ledger.<sup>30</sup> The entries in the volumes were, for the most part, chronologically ordered. Lapses from this format late in the period appeared to be efforts to organize the material from the Waste Book which was also entered

chronologically.<sup>31</sup> For the period under consideration, there were four Journals.<sup>32</sup>

The Ledgers were large, heavy volumes to which all the information amassed in the various supporting volumes was ultimately posted.<sup>33</sup> Each Ledger was organized by account name. Under each account name one found all the detailed information relative to that account which was posted from the Journals.<sup>34</sup> The function of this category was to present, in an organized format, all the information applicable to each account within the firm. The folio or page numbers annotated in the Journal entries equated to the appropriate folio number in the Ledger. The entries in the Ledger might be annotated with both the Journal folio number equating to the page location of the information which had been posted to the Ledger and the folio number equating to the location of the offsetting account(s) in the Ledger. The Ledgers were prepared in a standard format whereby either the left page was dedicated to the Debit entries, and the right page to the Credit entries, or one page was divided in half lengthwise with both Debit and Credit entries on the same page. In addition, when either side of an account was filled up in one part of the Ledger, other full or partially empty pages might be used for the additional information. The indices trace this path, and there were also forwarding notations on the full page. There were three Ledgers for this period.<sup>35</sup>

Three general categories of secondary account books were also important in understanding the record keeping in the DuPont Company at this time. There was much less agreement in contemporary literature as to the kinds of supporting or secondary records to be maintained by a firm.

The books in the library archives under the overall title Accounts Current serve a significant support purpose with respect to the firm's account books. These books were used to maintain a running account apparently for certain key and active agents in the field, and also for individuals or firms with very active accounts.<sup>36</sup> At times these volumes almost seemed to be Memorandum books where additional information could be stored.<sup>37</sup> The information in the earliest volumes could not be correlated easily with specific notations in other account books. Later on, however, transactions involving specific accounts included in the Accounts Current record books could be traced to other account books. There were four books within this category which cover this period of time.<sup>38</sup>

The Cash Books were used to document the cash disbursements of or for the company. The record keepers did not record any cash receipts in these volumes.<sup>39</sup> Such receipts were recorded directly into the book of original entry. The bookkeepers recorded the checks that were written on behalf of the DuPont Company as well as the few direct cash payments. The information that was recorded in

the Cash Books identified the recipient and, sometimes, the purpose of the check. Columnar headings attributed the expenditures to various firm components as applicable.<sup>40</sup> This information was then posted to the Journal, most likely at the end of the month. Initially, the only bank with which the DuPont Company had an account was the Bank of Delaware. Toward the end of this period, however, there were three banks with which the firm did business: The Wilmington & Brandywine Bank, The Farmers Bank, and The United States Bank. There were two books within this category that apply to this period.<sup>41</sup>

The last category of secondary record books to be considered was the Petit Ledger.<sup>42</sup> The bookkeepers recorded the employees' accounts with the firm in these volumes. They included wages owed to the workers, when and how the wages had been earned, and any payments made either in cash, or some good or service for or on behalf of the individual. These volumes are not considered a primary component of this research, but they are mentioned because they were systematically maintained account books within the DuPont Company's early record keeping system. Four volumes qualified as Petit Ledgers during this period.

In modern day society, Certified Public Accountants verify the financial statements and underlying transactions of publicly-traded corporations. Such supervision and verification was not, of course, available to early

nineteenth-century firms. These record books were essential to an understanding of the operations, worth and progress of the early DuPont Company. Unfortunately, however, in a period when no overseeing authority supervised either the methods used in keeping the books, or the backgrounds of the bookkeepers, some of the information contained in these volumes may be contradicted by other sources. This was particularly true in the case of the timing, nature, and ultimate value of the capital investment in the gunpowder manufactory during the period under consideration.



## Notes--Chapter One

- 1 This does not imply externally mandated reporting or disclosure requirements.
- 2 Numerous publications on bookkeeping were published prior to 1800. See Institute of Chartered Accountants in England and Wales. Historical Accounting Literature (London: Mansell Information/Publishing Ltd., 1975).
- 3 See the "Annotated Bibliography" for the identification, description and specific discussion of the general account books considered pertinent to this research. Examples from these volumes were altered to conform to current spelling, punctuation and capitalization norms for purposes of clarity. The substance of the original was maintained at all times.
- 4 Peter Bauduy was the first record keeper. Raphael Duplanty succeeded him as primary record keeper, although Bauduy continued to perform some of the bookkeeping. The handwriting of both of these individuals is distinctive, and readily identifiable.
- 5 The Deed of Association in its entirety is reproduced in appendix A.
- 6 Darwin Stapleton, "The Transfer of Technology to the United States in the Nineteenth Century." (Ph.D. Dissertation, University of Delaware, 1975), p. 70. In discussing E. I.'s studies at the Administration of Powder and Saltpetre, Stapleton mentions E. I.'s probable experience as a bookkeeper. The statement apparently stems from his translation of two terms, designating a rank within the gunpowder administration. A literal translation of the terms using contemporary dictionaries, specifically when considered within the context of the documents he quotes, suggests that the position was one of administration, an "accountable" or "overseer" position. John Garner, Le Nouveau Dictionnaire Universel. Vol. 1: French--English. (Rouen, France: Pierre Dumesnil et Fils, 1802) (hereafter cited as Garner, Le Nouveau). Stapleton even states that E. I. was not learning how to be a powder maker, but rather how to be an administrator of a powder

manufactory. A closer examination of the translation by B. G. DuPont of a letter from Pierre to E. I. shows it to be in error. The letter does not translate as "I would . . . rather have you employed at book-keeping at the Arsenal." P. S. DuPont to E. I. DuPont, April 17, 1790. DuPont, Life, I:122. Instead, this should have been translated to read "I would . . . rather have you employed in responsibility at the Arsenal." Longwood Manuscripts, Group 1, Box 51. Garner, Le Nouveau. This translation goes along with E. I.'s management training. The idea of administration does not preclude some familiarity with bookkeeping, of course, but it does support my contention that E. I. was not a bookkeeper.

- 7 E. I. maintained the record of powder sales, #1640 and its successor volume, #1643. There is evidence that he also, occasionally, reviewed the books and annotated or generated some of the entries. He did not perform a complete audit of the books, however. Accession 500, Powder Sales Book, #1640. Accession 500, Powder Sales Book, #1643. Not in Annotated Bibliography.
- 8 Dorothy Garesche Holland, The Garesche, de Bauduy, and des Chapelles Families (Saint Louis: Schneider Printing Company, 1963.), p. 24 (hereafter cited as Holland, Families).
- 9 See the partnership agreement with Bauduy in appendix D. Bauduy apparently did not limit his involvement with the firm to the seven-month time frame.
- 10 Prior to this he was either out of town, or negotiating his agreement with E. I. DuPont. Life, VI:74-82, for example.
- 11 Accession 500, Blotter, #848, folio 1. Accession 500, Journal, #877, first page.
- 12 His handwriting continues to show up in the primary account books after February 11, 1806. Accession 500, Journal, #877. Accession 500, Blotter, #848. Duplanty does not assume maintenance of the Journal until after December 31, 1808. Accession 500, Journal, #877.
- 13 Riggs, Guide, p. 75. Holland, Families.
- 14 Duplanty generated a record keeping book. Since the dates were 1802, this may have predated his official affiliation with the firm and possibly represented an attempt to assist E. I. or Bauduy in keeping the accounts.

- 15 Accession 500, Journal, #877, folio 71. Accession 500, Blotter, #848, folio 52.
- 16 The principal account books were the Waste Book, the Journal, and the Ledger. Accession 500, Journal, #877, first page. (For a complete discussion of the timing of shareholder investment, see Chapter Two.)
- 17 This process was not introduced until February 11, 1806 when the information in the Factory Building Book was posted to the Journal, and the Ledger was created. Accession 500, Blotter, #848, folio 71. Accession 500, Journal, #877, folio 52. Accession 500, Ledger, #934.
- 18 Accession 500, Journal, #877, folio 71. Accession 500, Blotter, #848, folio 52.
- 19 John B. Geijsbeek, trans. Ancient Double-Entry Bookkeeping. Lucas Pacioli's Treatise (A.D. 1494-the Earliest Known Writer on Bookkeeping) (Reproduced and Translated. Denver, Colorado: 1914).
- 20 Mair, Moderniz'd. Dillworth, Assistant.
- 21 These accounts were annotated with the terms "Proper," "in Company," "Factorage," or "Current." Proper and Current were essentially the same, and meant an active account with a firm. The Account in Company was the investment account. The Factorage Account was an agent's account with a firm. Dillworth, Assistant, not numbered.
- 22 Mair, Moderniz'd, p. 20.
- 23 Accession 500, Journal, #877, folio 71. Accession 500, Blotter, #848, folio 52. The Ledger was maintained by Duplanty and therefore would not have been instituted until he assumed primary responsibility for the record keeping as of February 11, 1806.
- 24 The Oxford English Dictionary definition of a Blotter which applies to bookkeeping states that it is "a term applied in counting houses to a wastebok." The reference given in this entry is dated 1847. It would appear that no reference to a Blotter has as yet been found in eighteenth-century literature since neither the Oxford English Dictionary nor its supplements reference volumes published during that century. James A. H. Murray, ed. A New Oxford Dictionary on Historical Principles. (Oxford: Clarendon Press, 1888). R. W. Burchfield, ed. A Supplement to the Oxford English Dictionary. (Oxford: Clarendon

Oxford England Press, 1972). Certainly, the contemporary editions of the popular works cited here do not mention the term "Blotter." Mair, Moderniz'd. Dillworth, Assistant. This does not mean it was not in use at this time, as an independent, rough account book of original entry.

- 25 Accession 500, Blotter #848, 849, 850, 851, 852, 853, 854. The functions of all seven volumes are discussed in detail in the Annotated Bibliography.
- 26 Mair, Moderniz'd. Dillworth, Assistant.
- 27 This may be "Sundries Dr. to Cash," for instance, or "U. S. Bank Dr. to Sundries." The information included in the term Sundries would then be detailed in the entry itself.
- 28 Accession 500, Waste Book, #862, 863. There are references to another, earlier Waste Book on October 9, 1809, in the Journal for that period which indicates "as per minute a/c in waste book," but this volume apparently no longer exists. Accession 500, Journal, #878, folio 13.
- 29 Accession 500, Journal, #877, 878, 879, 880.
- 30 Mair, Moderniz'd, p. 8. Mair saw the Journal as "the book wherein the transactions recorded in the Waste-book are prepared to be carried to the Ledger, by having their proper debtors and creditors ascertained."
- 31 The bookkeeper's attempts to organize the Journal included all entries for each account name dated at the end of the month. The information was not recorded as a complete Debit and Credit entry, but rather was disaggregated into separate Debit and Credit groups. Over time, the rigor of this practice decreased, however, and eventually such information was accumulated for a couple of pages only.
- 32 Accession 500, Journal, #877, 878, 879, 880.
- 33 Mair, Moderniz'd, p. 3. Mair described the Ledger as "the Waste-Book taken to pieces, and put together in another order: the transactions contained in both are the same, but recorded in a different manner."
- 34 Mair, Moderniz'd, p. 3. Mair felt of the Waste Book that "the Ledger contains the very same things, but artificially disposed, so as things of the same kind are classed together, and all the particular items

and articles belonging to the same subject are collected and united."

- 35 Accession 500, Ledger, #934, 935, 936.
- 36 There was also information on other shareholders in the firm, such as Necker-Germani, Duquesnoy, and Mme de Pusy. Mme de Pusy received very little space in the Ledgers, but she was allocated a great deal of space in the appropriate Accounts Current. There were also references in the various Accounts Current volumes to certain firms with which the principals in the DuPont Company had close ties. Such firms as Bauduy, Garesches and Company, and DuPont, Bauduy and Company were included in these volumes.
- 37 Accession 500, Accounts Current, #1064. Information on Treasury notes as investments was included in this volume.
- 38 Accession 500, Accounts Current, #1064. Other volumes that apply to the period under consideration were not included in the Annotated Bibliography. These other volumes were considered secondary account books without bearing on this research.
- 39 The few cash receipts were included in the regular entries. Accession 500, Cash Book, #1035.
- 40 E. I. DuPont, Peter Bauduy, and other firm components.
- 41 There is reference to a Cash Book which is no longer extant.
- 42 Accession 500, Petit Ledgers, #961, 962. These are not included in the Annotated Bibliography, but they resemble the description of payroll records in Accession 500, Blotter, #849.

## Chapter Two

## THE CAPITALIZATION

The early investors in the DuPont Company could not offer the firm much direct cash investment. Instead, they attempted to complete alternative financing arrangements either by taking care of obligations owed by the firm, or undertaking some other means of completing their investment promise. Initially, the bookkeeping techniques used by Bauduy to document such events were insufficient and generally inaccurate. This complicated efforts to determine the sequence of events leading to the initial capitalization. Subsequently, events and their aftermath caused dramatic changes in the capitalization of the gunpowder manufactory. Bauduy's disenchantment as a partner and eventual withdrawal from the firm and the addition of numerous petty shareholders due to the dissolution of DuPont de Nemours Father, Sons & Company were significant events documented by the firm's record keeping.

When E. I. convinced his father that the operation of a gunpowder manufactory might solve the family's fiscal concerns, he had only taken the first step on the long road to success. From the beginning the DuPonts considered the prospective gunpowder manufactory essentially an offshoot,

or branch, of Pierre's firm, the "parent company", DuPont de Nemours Father, Sons & Company.<sup>1</sup> The family wanted the parent company to remain in control of all operations and decision making for the new firm.<sup>2</sup> Therefore, E. I. had to deal with several problems associated with the need to fund the new enterprise almost immediately.

E. I. had already decided to capitalize the gunpowder manufactory for \$36,000, and had divided this amount into eighteen shares of \$2,000 each.<sup>3</sup> He believed this amount would adequately finance the start up and early operating costs of the enterprise. The family determined that two-thirds of the invested capital, or twelve of the shares, would have to be funded by the parent company for control of the gunpowder manufactory to remain in the hands of the DuPonts.<sup>4</sup> Unfortunately, the parent company could not provide enough investment capital out of available funds to purchase the necessary shares in the firm.<sup>5</sup> The family therefore devised a scheme whereby an investor in one share of the new firm also purchased two additional shares of the same value in the parent company. Pierre would then use this additional investment to purchase two shares in the gunpowder manufactory in the name of his firm. If the plan worked, a six-share investment in the gunpowder manufactory by any number of investors would automatically fund the parent company's planned investment in the firm.<sup>6</sup> This stipulation probably increased the

difficulties E. I. faced in the process of funding his endeavor, largely because his father's firm was not successful.<sup>7</sup> In addition to this, however, other circumstances also served to complicate his quest for funding.

When E. I. did finally concern himself with the funding for his new enterprise, he turned to the investment sources he and his family knew best, the French. The French investors he approached included individuals who had already invested in his father's firm, as well as those who had only promised support or expressed interest in that venture.<sup>8</sup> E. I. had little to present to these potential investors, however, other than his plans for the gunpowder manufactory. He therefore urged potential backers to take a chance on an unseen, untried enterprise located overseas, and virtually inaccessible to the French investors.<sup>9</sup>

The fact that E. I. had little success meeting the capitalization requirements he envisioned for the firm, belies documented evidence to the contrary. For a complete understanding of the sequence of events leading to the initial capitalization of the firm such evidence must be considered in light of other, relevant information.<sup>10</sup>

The Deed of Association, for instance, listed several shareholders in E. I. DuPont de Nemours & Company as of April 21, 1801.<sup>11</sup> The fact that this document existed, however, did not mean that the shareholders' signatures had



been obtained on that date.<sup>12</sup> The document was, in all likelihood, prepared on April 21, 1801, and yet remained unsigned by the shareholders for some time.<sup>13</sup> The first account book of original entry also provides conflicting information concerning the initial capitalization of the firm.<sup>14</sup> The entries not only contradicted the evidence presented in the Deed of Association, but also included some additional misleading information.

The actual investment sequence differs considerably from the documented sequence implied in both the Deed of Association and the first account books.<sup>15</sup> Indeed, E. I. returned from France in July 1801 with little success to report in his efforts to fund the gunpowder manufactory.<sup>16</sup> At that time he had only attracted two investors for the firm: Jacques Bidermann and the firm, Catoire, Duquesnoy & Company. In fact, these were the only two of the original investors who were in a position to sign the Deed of Association on April 21, 1801.<sup>17</sup>

Jacques Bidermann, a successful Parisian banker born in Switzerland, had been the largest investor in Pierre's original firm.<sup>18</sup> He was also in all likelihood the first person E. I. contacted when he arrived in France in early 1801.<sup>19</sup> Even though Bidermann was well aware of the suggested changes in the objectives of Pierre's firm, when E. I. approached him concerning the funding for the gunpowder manufactory, he agreed to support the

enterprise.<sup>20</sup> He agreed to purchase one share in the gunpowder manufactory directly, and fund two shares in the name of the parent company.<sup>21</sup> Bidermann did not invest cash directly in the firm. Rather, the proceeds of his investment were used to pay for materials and machinery E. I. had bought in France.<sup>22</sup> Any remainder was to be remitted to the company.<sup>23</sup> Apparently payments were completed.<sup>24</sup> Bidermann limited his direct investment in the gunpowder manufactory to only one share, however. His signature appeared on the Deed of Association and his name was included in the first record book.<sup>25</sup> Bidermann continued his affiliation with the firm throughout the period under consideration.

The firm Catoire, Duquesnoy & Company probably agreed to invest in the gunpowder manufactory at least in part because of the long standing friendship between Pierre and Adrien Cyprien Duquesnoy.<sup>26</sup> The firm agreed to the investment stipulations presented by the family while E. I. was still in France.<sup>27</sup> Again, this investment did not directly involve cash. Instead, the firm apparently planned to fund its investment with the proceeds from the sale of a load of salt.<sup>28</sup> As with Bidermann, it was not clear when and if the shares were ever funded. Nonetheless, the name of the firm appeared on the Deed of Association, and Duquesnoy's name alone appeared in the

first entry.<sup>29</sup> Duquesnoy remained a shareholder in the firm until December 31, 1809.<sup>30</sup>

Louis Necker de Germany (hereafter Necker-Germany), elder brother of the former French Finance Minister, Jacques Necker, was also recognized on the original Deed of Association and in the first record book entry as the owner of one share of stock in the gunpowder manufactory.<sup>31</sup> Again, the timing of his investment, and of his signature, was not clear. Certainly, Necker-Germany had not purchased any shares in the gunpowder manufactory while E. I. was still in Paris. He had only expressed an interest in the enterprise before E. I. returned to the United States in July 1801, but E. I. continued to hope that he would invest in the firm in accordance with the terms for such investment.<sup>32</sup> Unfortunately Necker-Germany in his turn attached his own stipulations to the investment.<sup>33</sup> Apparently he finally agreed to take one share in the gunpowder manufactory and one in the parent company.<sup>34</sup> Necker-Germany continued his affiliation with the firm until his death, when the responsibility for the realization of his investment fell to his survivors.<sup>35</sup> The account for Necker-Germany therefore remained open until May 1808 when this share was transferred to E. I.<sup>36</sup>

The only other significant early investment in the gunpowder manufactory was an unexpected windfall that greatly benefited the young firm. On August 8, 1801,

Victor indicated that Jacques Necker, the former French Finance Minister, had offered to loan the family \$9833.40 to be used for the gunpowder manufactory.<sup>37</sup> The proceeds of this windfall were not treated as a direct investment in the gunpowder manufactory, however. Rather, the loan was treated as an additional investment by the parent company in five shares of the gunpowder manufactory.<sup>38</sup> The repayment schedule for the loan was not clear.<sup>39</sup> Necker died on April 9, 1804, in Coppet, Switzerland. His daughter, Anne Louise Germaine Necker, Baronne de Staël-Holstein (Mme de Staël) apparently inherited the right to collect the loan.<sup>40</sup> This loan, although so badly needed at the time, would eventually cause E. I. and his father a great deal of trouble.<sup>41</sup>

As is evident, E. I. preferred French investors for his enterprise, and was leary of Americans. He nonetheless eventually had to accept an American offer of support. Such support came from Archibald McCall, a merchant in Philadelphia. On May 1, 1802, one-eighteenth of the capital (\$2000) that was accorded to the parent company was transferred to Archibald McCall.<sup>42</sup> McCall preferred a more sizable investment in the enterprise, however, and wanted at least three shares in the firm.<sup>43</sup> The DuPont brothers who were handling the transaction recognized the benefits of minimizing the number of different shareholders in the firm. They also realized that no investors "outside"

of the family should achieve the upper hand in any negotiated transaction.<sup>44</sup> McCall's offer continued to occupy the brothers.<sup>45</sup> McCall paid \$1000, half of the cost of a share, to the company on November 26, 1802, at least five months after he expressed his intention to invest in the firm.<sup>46</sup> E. I. finally resolved the conflicts with McCall in September 1803. He terminated his arrangement with McCall on the 5th of that month, and returned the \$1000 he had invested to McCall on that date. McCall's share of stock was transferred to Peter Bauduy at the same time.<sup>47</sup> Archibald McCall continued to function as an agent, contact, supplier and creditor for the gunpowder manufactory despite this sequence of events.<sup>48</sup>

Another early investor in the gunpowder manufactory, William Hamon, became affiliated with the firm in 1802. At this time, E. I. decided on a location for his firm and attempted to purchase land along the Brandywine River in Delaware for this purpose. Unfortunately, aliens were not allowed to buy land in their own names.<sup>49</sup> E. I. therefore had to find an American citizen to make this important purchase. The person he chose, William Hamon, was a naturalized citizen from Santo Domingo, and the brother-in-law of Peter Bauduy.<sup>50</sup>

Hamon also agreed to purchase one of the firm's shares, probably in June 1802.<sup>51</sup> In all, Hamon appears to have paid \$1500 toward his subscription in June and August

1803.<sup>52</sup> William Hamon was forced to give up his interest in the manufactory in September 1803 because of "The certain loss of all my property in San Domingo" which "changes all my plans in this country."<sup>53</sup> His share of stock was transferred to Peter Bauduy on September 9, 1803.<sup>54</sup> Hamon's account with the company continued for some time, however, and despite his financial reverses he was apparently in no rush to recoup his investment in the firm.<sup>55</sup> Hamon's name did not show up on the Deed of Association.<sup>56</sup>

Peter Bauduy, DuPont's first record keeper, was also, in the early years, the most important investor in the gunpowder manufactory. This distinction applied because his investment was not restricted to the purchase of shares, but included the extension and arrangement of credit opportunities imperative to the continuance of the firm.<sup>57</sup> In one way and another he had a decided impact on the health and future both of the founder of E. I. DuPont de Nemours & Company, and of the enterprise itself.

Bauduy first became involved with the firm when E. I. was looking for a location for his mills.<sup>58</sup> Once E. I. had chosen Wilmington as the optimal location for the manufactory, he and Bauduy worked closely together to locate the gunpowder works along the Brandywine River.<sup>59</sup> Having helped the DuPont family locate in Wilmington, Bauduy indicated that he also wanted to participate in the

enterprise. The correspondence between Bauduy and E. I. in mid-1802 indicated that E. I. believed Bauduy's conditions unreasonable.<sup>60</sup> He did not rule out the possibility of a partnership, however, especially since Bauduy offered him so much support in funding the firm.<sup>61</sup> Victor strongly encouraged an association with Bauduy as well.<sup>62</sup> After much negotiation, Bauduy became a partner in the firm on August 25, 1802. His terms were delineated in separate Articles of Agreement drawn up with the parent firm. In exchange for his investment Bauduy received two shares in the enterprise, three of the eighteen shares of the profits earned by the firm, and a two and one-half percent commission on powder sales.<sup>63</sup> In addition, he managed to purchase the shares that McCall and Hamon were selling.<sup>64</sup> Once again, none of these transactions involved cash.<sup>65</sup> Despite Bauduy's value to the firm, from the early days of the relationship, strains were growing.

E. I. had gone into the manufactory not as an owner, but as a manager. His past experience as a management trainee in the Administration, and as manager of his father's print shop in Paris taught him management skills that particularly qualified him to fill this position. He therefore was designated the director of the manufactory in the Deed of Association.<sup>66</sup> The director's responsibility was to establish and superintend the day-to-day operations of the business to the best of his ability for the benefit

of the shareholders, and particularly for the benefit of the majority shareholder in the gunpowder manufactory, considered from the very beginning of the enterprise to be DuPont de Nemours Father, Sons & Company.<sup>67</sup> His interpretation of his responsibility to the shareholders was probably based, in a large measure, on his understanding of the organizational construct of the firm.

His father's firm had been organized as a "société en commandite."<sup>68</sup> A "société en commandite" involved several "sleeping partners" who invested money in the venture, but had no managerial rights or responsibilities. Such an organization could guarantee limited liability to these silent investors.<sup>69</sup> The family believed that the same business forms would apply in the United States as well.

Such was not the case, however. In the United States, the limited partnership did not exist at this time. All recognized partners in a firm were subject to unlimited liability.<sup>70</sup> Bauduy understood this, and therefore held an entirely different view of his responsibilities in the organization. Whereas E. I. considered himself entirely in charge, Bauduy as a partner realized his potential liability for the obligations of the firm, and therefore wanted a more active role in operations. These opposing points of view became apparent early in the firm's history and caused a great deal of ill feeling and discord which



pervaded all the years of the partnership between E. I. and Bauduy.

The first evidence of trouble between the two concerned a serious disagreement in October 1804 involving an advertisement placed by McCall in a Philadelphia newspaper. The incident erupted into a conflict which almost destroyed the new firm.<sup>71</sup> The conflict was finally resolved, at least in part because E. I. drew up a new agreement with Bauduy dated July 1, 1805.<sup>72</sup>

In the Deed of Association the original termination date for the first partnership was January 1, 1810. In accordance with Articles 14 & 15, the original shareholders were to indicate their intentions with respect to the firm--whether to stay owners or not--before January 1, 1809. Arrangements were made to allow shareholders to withdraw without dissolution of the partnership at that point if less than one-third of the firm's owners chose that option. The disenchanted shareholders would receive a return of and on their investment in the form of 6% interest. The first partnership ended on December 31, 1809, in accordance with Article 13 of the original Deed of Association.<sup>73</sup>

On December 31, 1809, bookkeepers recorded in the Profit and Loss account interest on various shares accorded to certain individuals.<sup>74</sup> On that date, immediately prior to the new agreement, DuPont de Nemours Father, Sons &

Company was accorded interest on eleven shares, Duquesnoy interest on one share, Necker-Germany interest on one share, and Bidermann interest on one share. Bauduy and E. I. were accorded some interest, although it was not clear if this involved their investment in the firm. Catoire, Duquesnoy & Company sold their share in the firm to the parent company as of this date on the books although the shares were apparently purchased at the end of 1807.<sup>75</sup>

On January 1, 1810, the record keepers recorded the following holders of "Shares in the primitive Stock" in the Waste Book: Biderman (one share), E. I. DuPont (one share), Peter Bauduy (four shares), and Dupont de Nemours Father, Sons & Company (twelve shares).<sup>76</sup> The new partnership was supposed to remain active for nine years.<sup>77</sup>

In mid-1811, however, an event occurred which would have far reaching repercussions for the DuPont family and the company. The parent firm to the gunpowder manufactory, DuPont de Nemours Father, Sons & Company, was originally scheduled to terminate in July of either 1811 or 1812.<sup>78</sup> The company was actually dissolved on May 20, 1811.<sup>79</sup> The only assets owned by the firm of any value were the shares in the gunpowder manufactory. As early as April 1808 Pierre had allocated the shares his firm owned in E. I. DuPont de Nemours & Company among his shareholders, and effectively identified that these shareholders would be given the option of receiving the principal plus interest

on their investment, or of becoming shareholders in the gunpowder manufactory.<sup>80</sup> There were no indications in the record books of the gunpowder manufactory on May 20, 1811, of the dissolution of the parent company, or of the decisions made by the shareholders. Such documentation did not exist until February 1815.

During the intervening period, the relationship between E. I. and his principal partner did not go smoothly. Despite the controversies and uneasiness between the two men, their families were close. Thus, to further complicate matters, Bauduy's son, Ferdinand, married E. I.'s daughter, Victorine, in late 1813. Tragically, Ferdinand died within weeks of the wedding in January 1814.<sup>81</sup> Apparently the alienating dissatisfaction experienced by Bauduy had only been temporarily banked over the intervening years, and had been germinating just below the surface. Perhaps because of his son's death and the concomitant grief he experienced, in June 1814 the anger that Bauduy had repressed was released.<sup>82</sup> There was so much bitterness and controversy on both sides that Bauduy finally withdrew from the firm on February 28, 1815.<sup>83</sup>

Immediately prior to the documentation of Bauduy's withdrawal from the gunpowder manufactory, but still dated February 28, 1815, the record books of E. I. DuPont de Nemours & Company recorded the allocation of the twelve

shares in the gunpowder manufactory to the shareholders of DuPont de Nemours Father, Sons & Company.<sup>84</sup>

The events of February 1815 would occupy the DuPonts for the rest of the period under consideration, and for several years after. There was much interaction between all of the partners in the gunpowder manufactory as they attempted to resolve conflicts within the firm. Bauduy was especially disturbed by the events and their aftermath. Eventually, he initiated a Chancery Suit which was dated April 18, 1817.<sup>85</sup> The account books were introduced as evidence in this suit.<sup>86</sup> Since the Chancery Suit was not resolved until well after the period under discussion, it is merely mentioned at this point. The controversy over the account books during the suit does make this topic an ideal candidate for future research, however.

The DuPonts never increased the gunpowder manufactory's capital base during the period in question. The family could therefore not anticipate possible cash inflows from outside investors. Instead, any additional cash flows depended on the firm's successful operations. This constraint was less significant than it would be in the late twentieth century, however. Modern demands for cash to fulfill operational requirements, meet interest payments, and attract investors did not apply in the early nineteenth century. Cash flows were not nearly as important in the credit-based economy of that period.

## Notes--Chapter Two

- 1 P. S. DuPont to Jacques Bidermann, December 1, 1801. DuPont, Life, V:192.
- 2 "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245.
- 3 This was recorded on the Deed of Association. See appendix A for a complete translation of this document.
- 4 "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245.
- 5 DuPont de Nemours Father, Sons & Company, initially severely undercapitalized itself, had never been a successful venture and had no excess monies to invest. P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:165,195. Saricks, de Nemours, p. 287.
- 6 In "Notes concerning the Powder Manufacture," E. I. stipulated that "no one shall buy a share in the powder without at the same time taking two others of the same value in the Du Pont firm. By this plan six shareholders will provide sufficient capital for the enterprise, and Du Pont & Co. will hold two-thirds of the stock without being obliged to use its own resources." "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245. Under this plan, all the shares in the firm which the parent company owned would effectively have been funded by someone else.
- 7 The family apparently devised this scheme before E. I. first attempted to find investors for his firm. Thus, when he did approach investors, he had to convince each one to invest at least \$6,000 in three shares in the gunpowder manufactory, although only one of the shares would be allocated to that investor. "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245.
- 8 The same names show up over and over again either as actual or potential investors for one or the other of the DuPont enterprises. "Present Status of our Project", undated. DuPont, Life, V:99-109. P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:163-196. Thus, he probably also had to

deal with another complication. His brother Victor's responsibilities at this time involved acquainting his father's existing and potential investors with Pierre's proposed revisions of the original objectives of his firm. Unfortunately, some aspects of Pierre's proposals for international commerce caused concern among interested parties, including Victor himself. As he said in a letter to his father and brother "I have tried to conceal my own fears in order to quiet those shown to me by different people." Victor DuPont to Du Pont de Nemours Father, Sons & Company, August 8, 1801. DuPont, Life, V:255. The fact that the gunpowder manufactory did not fall into the same category as these other proposals probably did not completely quell the perceived risk associated with investment in a "DuPont family" undertaking.

- 9 He had no definite plans when he first approached potential investors beyond a general critique of gunpowder manufacturing in the United States, and a description of the location and buildings he hoped to construct. "On the Manufacture of War and Sporting Powder in the United States," undated. DuPont, Life, V:198-205. "The Location and Constructions Necessary for Manufacture of Gunpowder," undated. DuPont, Life, V:206-212.
- 10 Detailed examination and correlation of existing documentation concerning the firm's capitalization highlights probably the most confusing morass of information available on the early years of the firm's existence.
- 11 Refer to the Deed of Association in appendix A. The shareholders' signatures are all apparently authentic, except for those of Necker-Germany, and the firm, DuPont de Nemours Father, Sons & Company. The firm's name was inserted in the handwriting of the drafter of the document. Necker-Germany's name was inserted in the handwriting of E. I. DuPont.
- 12 Refer to appendix A. There is no clear indication on this document of the dates of the original signatures. E. I.'s intentions in terms of share subscriptions were apparently of no concern to the Paris authorities. It is possible that the Deed of Association was an official document the original of which was drafted and recorded in a Parisian administrative department. If so, the document in the hands of the DuPonts may have been a duplicate of that original. It is also feasible that the DuPonts held the original of the document which was drafted by a

clerk in such a department. In any event, the signatures on the Deed of Association were obtained at various times in both France and America. If an original did exist in Paris, some of these signatures would not have been recorded there. The department could have been informed by mail of the share allocation, of course, but there is no evidence for this.

- 13 The full text of the Deed of Association as found in appendix A as well as the allocation of the first six evenly spaced single shares, and the twelve shares allocated to DuPont de Nemours Father, Sons & Company, were all written in the distinctive handwriting of the unidentified drafter of the document. All other entries and signatures were made by others, identified as necessary. Not the least of the problems with the signatures on the Deed of Association is that it records a total of nineteen shares allocated to shareholders instead of the originally planned eighteen. If all these shareholders were in some way affiliated with the firm, then there must have been a discrepancy either in the number of shares arbitrarily allocated to DuPont de Nemours Father, Sons & Company prior to the time when they were actually funded, or in the subsequent recording of the share ownership. Necker-Germany's name and share allocation were obviously inserted between two evenly spaced lines in E. I.'s distinctive handwriting, possibly as an afterthought.
- 14 The entries recording the initial capitalization are duplicated in appendix C. The first record book of original entry was maintained as a type of day book during the period when Peter Bauduy was the only bookkeeper. The handwriting of Peter Bauduy was very distinctive and easily identifiable. It was not until Duplanty took over responsibility for the record keeping in February 1806 that the first record book can technically be called a Journal. The first two entries were dated as if entered on the day the firm was formed. From all indications this day book did not exist until well after the date on the Deed of Association. Peter Bauduy did not become involved with the firm until E. I. was seeking a location for the powder factory. This did not occur until after E. I. returned to the United States in July 1801. P. S. DuPont to E. I. DuPont, July 12, 1801. DuPont, Life, V:236. P. S. DuPont to Thomas Jefferson, July 23, 1801. DuPont, Life, V:238. Further, Bauduy did not officially affiliate with the firm until August 25, 1802, when he formed an agreement with the firm as

shown in appendix D. There is no reason to suspect that he had anything to do with the record keeping until after this time. Therefore, the capitalization entries dated April 21, 1801, in all likelihood, reflected events as of the time Bauduy affiliated with the gunpowder manufactory in 1802. The shareholder information recorded in the first entries in the day book under that date therefore included events occurring well after April 21, 1801. Additionally, according to these first entries, the gunpowder manufactory as of April 21, 1801, was completely capitalized. This was not possible, however, since full funding for the firm had not even been identified at this point. Investment promises usually yielded little in the way of monetary support, at least immediately. "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245. Part of the confusion caused by these entries involved the allocation of fifteen shares in the gunpowder manufactory to DuPont de Nemours Father, Sons & Company as shown in the entries in appendix C. Certainly this allocation differed from the allocation on the Deed of Association. There are two possible interpretations of this allocation. One is that Bauduy, already described as an unsophisticated record keeper, simply allocated the shares in the only way he could to record the full capitalization of \$36,000. It is also possible, however, that he recognized that the gunpowder manufactory, as a branch of the parent company, was considered "wholly owned," if not funded, by that company. Therefore, the assumption that all shares belonged to the parent company until purchased by someone else justified the allocation of any unsold shares to DuPont de Nemours Father, Sons & Company. Thus, for investors who were not included in the first record book entry, at the time of an initial share purchase the shares involved were transferred from the DuPont de Nemours Father, Sons & Company "Account in Company" to the appropriate investor's "Account Proper." Accession 500, Ledger, #934, folios 16, 18, 20, 23, 25, 27. It is interesting to note that the more sophisticated record keeper, Raphael Duplanty, carried the entries of such transfers to the first Ledger exactly as documented by Bauduy. Thus, whether Bauduy stumbled to the right technique or deliberately documented the events in this way is immaterial.

15 Therefore, to understand the firm's capitalization, one must consider the letters of this period in addition to the other documentation indicated. DuPont, Life, I-XII.



- 16 E. I. returned from Europe between July 12 and July 23, 1801. P. S. DuPont to E. I. DuPont, July 12, 1801. DuPont, Life, V:236. P. S. DuPont to Thomas Jefferson, July 23, 1801. DuPont, Life, V:238.
- 17 At this point, Necker-Germany had only expressed an interest in investing in the firm and the others did not become involved with the firm until 1802. "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245.
- 18 "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245.
- 19 "My children's voyage to Europe and this letter which I am giving them for you are of decisive importance to our enterprise." In this letter, Pierre first suggested revising the original objectives of his firm, DuPont de Nemours Father, Sons & Company. P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:163.
- 20 P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:163. "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:244.
- 21 "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:244. Bidermann may have been impressed by the enthusiasm, knowledge and prior planning E. I. exhibited concerning the new firm. "On the Manufacture of War and Sporting Powder in the United States," undated. DuPont, Life, V:198-205. "The Location and Constructions Necessary for Manufacture of Gunpowder," undated. DuPont, Life, V:206-212. See appendix B. He may also have seen the gunpowder manufactory as the only viable solution to the uncertain economic conditions facing DuPont de Nemours Father, Sons & Company. P. S. DuPont to Jacques Bidermann, December 1, 1800. DuPont, Life, V:163.
- 22 "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:250-1.
- 23 "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:250. According to the first Ledger, Bidermann paid "DuPont de Nemours F & C<sup>o</sup> <sup>a</sup>/<sub>c</sub> P." (the account Proper) for his one share investment in the gunpowder manufactory. Accession 500, Ledger, #934, folio 14. The entry was undated, and cannot be dated precisely because his remittances on E. I.'s behalf in France were used, at least in part, to complete the transaction. The timing and even completion of the

promised payments for the two shares to be purchased by DuPont de Nemours Father, Sons & Company is even less clear since such payments did not show up in the record books attributed to Bidermann. What is clear is that completion of his promises took considerable time. E. I. DuPont to P. S. DuPont, June 12, 1802. DuPont, Life, VI:69. E. I. DuPont to P. S. DuPont, August 15, 1802. DuPont, Life, VI:98. It is also clear that in some instances these payments were used by Pierre and therefore may never have reached E. I. E. I. DuPont to P. S. DuPont, August 15, 1802. DuPont, Life, VI:97.

- 24 There do not seem to be any more complaints of non-payment after this letter sent by E. I. DuPont to P. S. DuPont, August 15, 1802. DuPont, Life, VI:96.
- 25 See appendices A and C. Bidermann was probably in attendance on April 21, 1801, and therefore could have signed the Deed of Association on that date. "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:250-1. He was apparently a staunch supporter of the enterprise, so much so that when E. I. left France in 1801, he left the Deed of Association with Bidermann so that the signatures of additional investors could be added. "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:244-5,247.
- 26 The two had been imprisoned in La Force together just prior to the fall of Robespierre. This is perhaps why the first record book identifies Duquesnoy alone in the entry in the day book to record the investment. See appendix C. He had also been approached by Pierre, but had never invested in his firm. Consequently, Duquesnoy was probably the individual in the firm E. I. approached.
- 27 "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245.
- 28 The plan dated April 21, 1801 and signed by DuPont de Nemours Father, Sons & Company was for the salt to be shipped to the U. S. by the DuPonts and sold by them for a commission. The amount received from the sale was to be applied against three shares in the gunpowder manufactory if the return was sufficient to cover this amount. (\$6000) If the sale could not be effected by June 20, 1802, (1 Messidor, Year X) then the firm would place \$4000 at the disposal of DuPont de Nemours Father, Sons & Company in France. When the salt was sold, the remaining share would be purchased and any excess remitted to the company. "Agreement between

- Catoire, Duquesnoy & Co. with DuPont de Nemours Father, Sons & Company." Winterthur Manuscripts, Group 2, Series D, Box 33, #5416. This was probably signed by E. I. on behalf of his father's firm. It was not, apparently, signed by Duquesnoy or other representatives of his firm.
- 29 See appendices A and C. Apparently, Duquesnoy completed his payments in 1801. Victor DuPont to E. I. DuPont, August 13, 1801. DuPont, Life, V:266.
- 30 Accession 500, Ledger, #934, folios 16, 17.
- 31 The hyphenated name distinguished this elder brother from his more famous sibling, the French finance minister, Jacques Necker. Necker-Germany's signature appeared on the Deed of Association but, as mentioned previously, it was obviously inserted almost as an afterthought. This accounts for the nineteen share allocation. See appendix A.
- 32 "Mr. Necker-Germany . . . seemed willing to take two shares in the Powder and therefore four in the DuPont Company. Mr. Bidermann offered to attend to this subscription." "Notes concerning the Powder Manufacture," undated. DuPont, Life, V:245.
- 33 In a letter from Victor dated August 8, 1801, fully three months after the date of the original Deed of Association, he indicated that "Mr. Necker-Germany will take two shares altogether, not more, and he will take one of them in the powder, if we choose." Victor DuPont to DuPont de Nemours Father, Sons & Company, August 8, 1801. DuPont, Life, V: 260. He still hadn't made a decision as of August 13, 1801 and in another letter from Victor, he states that "Mr. Germany is willing to take one but wants only that one without two in the Company, and I think I will give it to him." Victor DuPont to E. I. DuPont, August 13, 1801. DuPont, Life, V:266.
- 34 Longwood Manuscripts, #2368. Necker-Germany's refusal to adhere to the two-for-one share purchase policy meant that the parent firm could not even claim to fund as many shares as had been planned.
- 35 The date of his death is unknown. His survivors were "Mr. Necker of Saussure and . . . Madame Rillet-Necker, his son and daughter." Renewal of Gunpowder Manufactory, May 25, 1808. DuPont, Life, VIII:73.

- 36 Renewal of Gunpowder Manufactory, May 25, 1808. DuPont, Life, VIII:73. Accession 500, Ledger #934, folios 20, 21.
- 37 Victor DuPont to DuPont de Nemours Father, Sons & Company, August 8, 1801. DuPont, Life, V:258.
- 38 Longwood Manuscripts, #2368.
- 39 On at least two occasions, Pierre asked E. I. to mortgage the gunpowder manufactory to repay the loan. On April 24, 1802 he asked E. I. to mortgage the gunpowder manufactory to Necker for "9000 dollars." P. S. DuPont to E. I. DuPont, April 24, 1802. DuPont, Life, VI:25. Again on April 27, he asked his son to secure a "mortgage on the manufacture in Mr. Necker's favor" for "8889 dollars 65 cents." P. S. DuPont to E. I. DuPont, April 27, 1802. DuPont, Life, VI:31. There are no indications that he ever did so, however, and no Bills Payable for either of these amounts in the Ledger. Accession 500, Ledger, #934, folio 4.
- 40 All of Necker-Germany's accounts in the parent company were carried in her name from that time on. Auguste de Staël to E. I. DuPont, March 1, 1813. DuPont, Life, IX:90. Necker never owned any shares in the gunpowder manufactory; therefore neither his name nor his daughter's were included in the firm's account books. Nonetheless, Necker's loan "formed the principal part of the capital furnished by the Company DuPont Pere for the company." "Notes written for the information of Du Pont de Nemours," undated. DuPont, Life, X:38. Longwood Manuscripts, Group 8, Box 5 dated December 31, 1808. Accession 360 dated May 20, 1811.
- 41 "Notes written for the information of Du Pont de Nemours," undated. DuPont, Life, X:38-9. When DuPont de Nemours Father, Sons & Company dissolved in 1811, Mme de Staël apparently did not agree to accept shares in the gunpowder manufactory and wanted to be paid what the shares in the firm were worth. She was therefore no longer a DuPont shareholder, although payment took some years. Auguste De Staël to E. I. DuPont, March 1, 1813. DuPont, Life, IX:90.
- 42 Accession 500, Journal, #877, folio 2. The entry was crossed out on the first written page, which was unnumbered. The entry on folio 2 indicated that the transfer occurred on June 1, 1802. Accession 500, Ledger, #934, folio 23.

- 43 Victor DuPont to E. I. DuPont, August 17, 1802. DuPont, Life, VI:102. McCall also offered the struggling gunpowder manufactory a much needed source of funds. As E. I. noted "Mr. McCall, whose credit in Philadelphia may be useful to us in purchasing materials, has offered me from 4000 to 5000 Ds." DuPont, Life, VI:96.
- 44 Victor DuPont to E. I. DuPont, September 28, 1802. DuPont, Life, VI:117.
- 45 In October of the same year, Victor wrote "My advice about McCall is that it is best to give him the three shares, but on the express condition that he pays immediately." Victor DuPont to E. I. DuPont, September 28, 1802. DuPont, Life, VI:129.
- 46 Accession 500, Ledger, #934, folio 23. Accession 500, Journal, #877, folio 2.
- 47 E. I. DuPont to Archibald McCall, September 5, 1803. DuPont, Life, VI:274-5. Accession 500, Ledger, #934, folio 23-24.
- 48 Accession 500, Ledger, #934, folio 23,33.
- 49 Peter Bauduy to E. I. DuPont, October 16, 1801. DuPont, Life, V:300.
- 50 Holland, Families, p. 16. E. I. DuPont to William Hamon, April 26, 1802. DuPont, Life, VI:29. "Memorandum concerning land bought by E. I. DuPont," undated. DuPont, Life, VI:35-40.
- 51 Accession 500, Ledger, #934, folio 25-6. Accession 500, Journal, #877, second page. This volume says June 1, 1803, possibly a mistake.
- 52 Accession 500, Ledger, #934, folio 25. Accession 500, Journal, #877, second page.
- 53 William Hamon to E. I. DuPont, September 8, 1803. DuPont, Life, VI:275.
- 54 Accession 500, Ledger, #934, folio 25. Accession 500, Journal, #877, second page.
- 55 Hamon indicated that the firm's director was to "Take your time, my friend, about returning the \$1500." William Hamon to E. I. DuPont, September 8, 1803. DuPont, Life, VI:276.

- 56 See appendix A.
- 57 See appendix D.
- 58 Peter Bauduy to E. I. DuPont, October 5, [1801].  
DuPont, Life, V:289.
- 59 E. I. DuPont to Peter Bauduy, June 25, 1802. DuPont,  
Life, VI:73.
- 60 "Propositions made by Peter Bauduy to Messrs. du Pont",  
undated. DuPont, Life, VI:74-5. "E. I. du Pont's  
answer to the foregoing", undated. DuPont, Life,  
VI:76-80.
- 61 E. I. DuPont to P. S. DuPont, August 15, 1802.  
DuPont, Life, VI:96-7.
- 62 Victor DuPont to E. I. DuPont, August 12, 1802.  
DuPont, Life, VI:93.
- 63 See appendix D. Bauduy may have signed the original  
Deed of Association at this time as shown in appendix  
A.
- 64 Accession 500, Journal, #877, second page.
- 65 It looks, particularly early in the association, as if  
Bauduy used the amount of his investment to pay the  
debts of the firm as they were incurred. This is  
probably associated with the notations on these items  
in the Factory Building Book. Accession 500, Blotter,  
#848. These amounts show up as expenses of the  
manufactory when the information in the Factory  
Building Book was transferred to the Journal in  
February 1806. Accession 500, Journal, #877, folio 71.
- 66 See appendix A.
- 67 See appendix A, Article 4 of the Deed of Association.
- 68 Charles E. Freedeman, Joint-Stock Enterprise in France  
(Chapel Hill, North Carolina: The University of North  
Carolina Press, 1979), pp. 3-18.
- 69 Only one of six copies of the prospectus for DuPont de  
Nemours Father, Sons & Company identifies it as a  
société en commandité although this may have been  
understood by investors even though not written into  
each copy.

- 70 Unlimited liability did not exist at this time in America. "Statement made by DuPont (de Nemours) Father to the Shareholders in his Company," April 18, 1808. DuPont, Life, VIII:49.
- 71 McCall had placed the advertisement apparently with the knowledge and approval of Bauduy, but without the prior authorization by E. I. E. I. DuPont to Archibald McCall, undated. DuPont, VII:16-7. Misunderstandings on both sides fueled the disagreement. A vitriolic exchange erupted between the two men with charges and countercharges on both sides. E. I. suspected that Bauduy was trying to usurp his position as founder and Director of the firm, and relegate him to the position of head powderman. Bauduy, on the other hand, believed that E. I. was trying to present him as only a company clerk and not as a significant investor in the gunpowder manufactory. Peter Bauduy to Victor DuPont, December 13, 1804. DuPont, VII:68-77. The conflict became so bitter that at one point Bauduy threatened to withdraw from the firm. If he had taken such drastic action, the financial base of the enterprise would have been removed as well. He by this time owned four shares in the gunpowder manufactory, and had arranged and funded a number of loans for the firm. The family could ill afford such a financial crisis, and was in no position to redeem Bauduy's various investments. Finally, Victor stepped in as intermediary to quell the exchange. Victor DuPont to E. I. DuPont, December 17, 1804. DuPont, Life, VII:89-97. He was moderately successful, and eventually the controversy calmed.
- 72 See appendix D. This move, although apparently satisfactory to Pierre at least in the short run, did not serve to allay E. I.'s suspicions or concerns with respect to his partner. He continued to profess uneasiness and even fear concerning Bauduy's possible actions. At best, E. I. felt that Bauduy would not do the firm any harm, although he still expressed concern over the continued partnership. E. I. DuPont to P. S. DuPont, April 12, 1808. DuPont, Life, VIII:38.
- 73 See appendix A.
- 74 Accession 500, Ledger, #934, folio 106.
- 75 Accession 500, Ledger, #934, folio 17.
- 76 Accession 500, Waste Book, #862. The allocation of shares on January 1, 1810 did not occur without some ill feeling on the part of Pierre, however. Apparently, E. I. made a separate agreement with Bauduy

on this date, and in some way excluded his father's firm. A copy of this agreement has not been located. On May 25, 1808, Pierre, as representative of DuPont de Nemours Father, Sons & Company, initiated a document authorizing renewal of the gunpowder manufactory. Document renewing Gunpowder manufacture, May 25, 1808. DuPont, Life, VIII:72-3. This authorization must have reached E. I., although his recognition of this fact apparently did not, in turn, reach his father. E. I. DuPont to P. S. DuPont, May 26, 1811. DuPont, Life, VIII:302. The mail was very bad, however, and letters often did not get through. Consequently, although Pierre apparently misunderstood, the company had indeed been renewed with all shares allocated as desired. P. S. DuPont to E. I. and Victor DuPont, October 14, 1813. DuPont, Life, IX:119.

- 77 E. I. DuPont to P. S. DuPont, May 26, 1811. DuPont, Life, VIII:302. E. I., apparently acting on his negative feelings regarding Bauduy, continued to plot a way to remove him from the partnership. His father, Pierre, warned against such a move, however. "Copy of a letter from P. S. DuPont to E. I. DuPont," undated. DuPont, Life, VIII:117. Bauduy, although a trial, was better as a lukewarm partner, than as an enemy, he warned. Peter Bauduy, for his part, apparently decided to continue his affiliation with the firm. Apparently his alienation did not extend to giving up his interest in what to him seemed a potentially profitable venture.
- 78 "Statement made by DuPont de Nemours Father to the Shareholders in his Company," April 18, 1808. DuPont, Life, VIII:63. In this document the date of dissolution is set at July 1812. In the following letter, however, the date is given as July 1811, perhaps an error made when the letter was copied. "Copy of a letter from P. S. DuPont to E. I. DuPont," undated. DuPont, Life, VIII:119.
- 79 Longwood Manuscripts, Accession 360. Auguste de Staël to E. I. DuPont, March 1, 1813. DuPont, Life, IX:90.
- 80 "Sequel and Summary of the statement given April 18, 1808, to the Shareholders of the Company," undated. DuPont, Life, VIII:304-5. Auguste de Staël to E. I. DuPont, March 1, 1813. DuPont, Life, IX:90. P. S. DuPont to Jacques Bidermann, October 24, 1813. DuPont, Life, IX:127.
- 81 Peter Bauduy to E. I. DuPont, postmarked January 23, 1814. DuPont, Life, IX:168. Guide, p. 280.



- 82 "Copy of a letter written by Mr. Bauduy to Mr. Beauchet on June 21, 1814, and sent to Mr. Bidermann," undated. DuPont, Life, IX:196-200.
- 83 Accession 500, Journal, #879, folio 276. Accession 500, Ledger, #935, folios 91,65. Accession 500, Waste Book, #862, folio 254.
- 84 Accession 500, Journal, #879, folio 276.
- 85 Longwood Manuscripts, Accession 146, File 51.
- 86 Many of the account books were annotated as part of the evidence in the "7<sup>th</sup> Interrogatory." Examples -- Accession 500, Journal, #877, inside front cover. Accession 500, Ledger, #934, inside front cover.

### Chapter Three

#### ACCOUNTING FOR OPERATIONAL CASH FLOWS, CASH FLOW DEFICIENCIES, AND CREDIT RECEIVABLES AND PAYABLES

As is evident, the capitalization of the DuPont Company resulted in little direct cash investment. The firm's decision makers had virtually no resources to draw on in the early years, and cash flow deficiencies became immediately apparent. After all, E. I. needed to stockpile raw materials, hire and train personnel, and develop adequate production and support facilities prior to the sale of the first keg of gunpowder. The fact that he accomplished enough of these prerequisites to begin operations was significant. Perhaps even more significantly, he was able to do so despite the chronic lack of cash that would plague him for the rest of the period under discussion. Therefore, although E. I. had a great deal of trouble during this period, he nonetheless found ways to remain in operation.

The lack of available cash in the early nineteenth century meant that the DuPont record keepers adapted the company bookkeeping to document the methods devised by market participants to avoid the transfer of cash. Such adaptation was not difficult, and record keepers familiar with bookkeeping techniques easily accommodated the

remarkably pervasive and efficient credit-based system which existed. The success of this system allowed firms to easily devise alternative means of fulfilling promises to pay acceptable to all parties concerned. Apparently in keeping with common practice, DuPont Company record keepers therefore documented both formal and routine credit transactions and occasional bartered settlements of accounts in addition to the very few direct cash transactions which occurred. The bookkeeping used to accomplish this documentation was straightforward and direct.

Thus, record keepers debited the "Cash" account to indicate cash receipts, and credited the same account for cash disbursements. Most of these cash transactions can be traced to existing credit arrangements, however.

Company bookkeepers designated these notes or drafts "Bills Receivable" or "Bills Payable" depending on the originator of the obligation, and each note or draft specified a duration, amount, and required interest charge.<sup>1</sup> In addition, formal debt instruments could be substituted for routine obligations.<sup>2</sup>

The record keepers debited the "Bills Receivable" account to document the existence of a credit instrument owed to the firm. The following entry, dated March 14, 1806, depicts a situation where a short-term draft has been sent to a firm for payment on March 24, 1806.

- |     |  |     |   |
|-----|--|-----|---|
| 7.  | Bills Receivable to Mitchell & Sheppard \$500<br>amount of our Draft at 10 days accepted by them |     |   |
| 35. | payable March 24, entered as No. 20  | 500 | 3 |

Cash payments received for both formal and routine receivables were debited to the "Cash" account. Both of these situations were presented in the following entry dated March 24, 1806.

.73.	Cash to Sundries	\$548	
.7.	To Bills Receivables \$500 amount received in bank and put to the credit of E. I. D. P./bill No. 20	\$500	
.63.	To Preston Eyre \$48 amount of cash paid to E. I. D. P.	<u>48</u>	
		548	4

In addition to the "Bills Receivable" account, the bookkeepers documented the liabilities of the Company by crediting the "Bills Payable" account for the amount of any formal obligation owed by the firm. The offsetting debit(s) recorded the purchase of raw materials, the acquisition and construction of operating facilities, cash inflows from short-term notes, and other miscellaneous events. Thus, formal credit instruments constituted an important source of funding for the early DuPont Company. The first "Bill Payable" was issued on October 25, 1803, and cash was received. The following entry documents this event.

	Sundries to Bills Payables \$1500 amount of our note No. 1 due the 27 December . . .		
2.	Cash \$14.84 net proceeds	\$1484	
12.			
4.	Profit & Loss \$16 discount on \$1500	16	5

The following year, the company issued over thirty-five notes.<sup>6</sup> More were issued in subsequent years. The notes did not ensure the inflow of a large amount of cash, however, primarily because most of the transactions subsequent to those occurring in the very beginning involved the renewal of an existing obligation under the guise of a new note with a new number. Thus, when "Bills Payable" No. 1 was due for collection, No. 2 was issued, and the following entry was made on December 27, 1803.

Sundries to Sundries \$3000 as follows

2.	Cash \$1484 net proceeds of \$1500	\$1484
12.	Profit & Loss \$16 discount of D <sup>o</sup>	16
4.	Bills Payables - \$1500	
	Note No. 1 to take up	<u>1500</u>
		3000
4.	To Bills Payable \$1500 amount of our Note No. 2 due the 28 February	1500
2.	To Cash \$1500 put in Bank	<u>1500</u>
		3000 7

In this way a fairly uniform monetary balance appeared in the "Bills Payable" account throughout the period.<sup>8</sup>

The "Bills Receivable" and "Bills Payable" accounts could both be "accepted" by another party for collection. As an example of an acceptance, on February 24, 1804, the DuPont Company assumed responsibility for the debts of Victor DuPont de Nemours & Company and entered this transaction in the following manner.

22. V. DuPont de Nemours & Co. to Bills Payables  
 4. \$8640.40 amount of their drafts for  
 4300 in favor Governor & Kemble  
 destroyed 4340.40 or replaced by other drafts

No. I	2019.56	II	2340.40
I bis	2280.44	II bis	2000

due 25 May 4300 accepted 8640.40 9

Thus, the debts of Victor DuPont de Nemours & Co. became a "Bills Payable" of the gunpowder manufactory.<sup>10</sup>

In addition to formal credit arrangements company customers, agents, and even principals participated in many routine credit transactions. No matter which category an individual or firm belonged to, however, company record keepers debited the associated accounts to indicate receivables and credited them to indicate payables. Many of these transactions concerned the disposition of the company's product. A credit sale to a routine customer was debited to an account under his name. Sales to company principals were debited to their "Account Proper."

The following entry, dated March 18, 1806, depicts both of these situations.

27.	Peter Bauduy (a/c Proper)	\$9.50	
	for one keg delivered to Thomas		
	Beeson		\$9.50
63.	Preston Eyre	\$9.50 for one keg	
	of powder		9.50
107.	John Rively	\$16.70 for 1 keg of	
	powder and 12 pounds of Eagle		<u>16.70</u>
			35.70 11

The account of an agent was annotated with the word "Factorage" in the early account books.<sup>12</sup> An entry dated

March 28, 1806, indicating the delivery of powder to an agent, Anthony Girard, was therefore recorded as follows.

	Anthony Girard factorage to factory	\$2570	
119.	Amount of 48 kegs invoiced to him,		
	40 kegs at 9.50. 8 kegs at 12.50	\$480	
82.	Amount of 220 kegs invoiced to him at		
	9.50	<u>2090</u>	
		2570	13

Following the innovation in the company record keeping of February 11, 1806, the accounts created in the ledgers relating to company customers, agents and principals included information on receivables, payables, and payments on account. It was therefore possible that an account of a merchant who supplied the gunpowder manufactory and also interacted with the firm in another capacity as customer, agent or principal included amounts owed by the gunpowder manufactory to the merchant and by the merchant to the DuPont Company.<sup>14</sup> In addition, other receivables or payables were substituted at times for existing obligations. In this way, little cash changed hands and rarely can a relationship be established between a credit transaction and an associated collection. Barter arrangements also substituted for the exchange of cash, and were entered in the account books as payments on account.<sup>15</sup> The only way to determine whether an account constituted a receivable or payable was to identify the balance in that account. If the debit total was greater than the credit total, the account functioned as a receivable. If the

reverse was true, however, the DuPont Company had incurred a payable equal to the credit balance.

The workers occupied a separate category with respect to the cash flows and routine credit transactions of the DuPont Company. Information concerning specific workers was maintained in the company "Petit Ledgers." The record keepers recorded both cash payments and barter arrangements whereby the firm provided or paid for goods, services or other eventualities. The payroll constituted a drain on cash resources which could be deferred when barter arrangements were accepted by the workers in payment.<sup>16</sup>

The fact that such organized credit opportunities existed during the early nineteenth century implied that cash flow deficiencies were not a unique occurrence during this period. The procedures used by the company record keepers to document this largely credit-based society were straightforward, and not particularly innovative. The recognition of the more encompassing concepts of revenues, expenses and profits or losses resulted in some rather unexpected developments which will be presented in the following chapter.



## Notes--Chapter Three

- 1 The standard credit entry concerned a sixty-four day note with a six-percent interest charge.
- 2 In this case the record keepers documented a transaction that took information that had been debited to a personal account to indicate a receivable, or credited to the account to indicate a payable, and placed it in the "Bills Receivable" or "Bills Payable" account.
- 3 Accession 500, Journal, #877, folio 80.
- 4 Accession 500, Journal, #877, folio 81.
- 5 Accession 500, Journal, #877, folio 3.
- 6 Accession 500, Ledger, #934, folio 4.
- 7 Accession 500, Journal, #877, folio 4.
- 8 The balance hovered around \$5000 for the bulk of this period. Large amounts recorded in the last two years were due to significant purchases of saltpetre on credit. Accession 500, Ledger, #936, folio 42.
- 9 Accession 500, Journal, #877, folio 5.
- 10 This was in all likelihood related to the dissolution due to bankruptcy of Victor's firm.
- 11 Accession 500, Journal, #877, folio 80.
- 12 Accession 500, Ledger, #934, folio 119.
- 13 Accession 500, Journal, #877, folio 81.
- 14 Occasionally, entries document the exchange of powder for saltpetre.
- 15 Accession 500, Blotter, #849.
- 16 Accession 500, Blotter, #849. Examples of the kinds of goods or services provided by the company in lieu of cash are given in the "Annotated Bibliography."

Chapter Four  
REVENUES, EXPENSES, PROFITS AND LOSSES

The credit-based economy of the early nineteenth century essentially forced record keepers of the period to maintain the record books using a modified cash basis. The bookkeepers could therefore not rely on cash flow information alone to identify the firm's economic position. Thus, as a result of cash and credit transactions involving agents, customers and company principals the DuPont Company record keepers essentially recognized the expanded concept of revenues earned and expenses incurred in the operations of the gunpowder manufactory, regardless of when the associated cash was paid or received. The bookkeepers were then able to identify the financial position of the firm by isolating the profit or loss for a particular span of time.

The bookkeeping treatment for revenues earned as a result of gunpowder sales depended on the nature of the sale. Factory-direct cash or credit sales to customers or company principals were rare. When they occurred, such direct purchasers agreed to pay the price charged at the manufactory for the powder.<sup>1</sup> E. I. effected most sales through company agents, however, so that DuPont gunpowder would be widely distributed geographically. He offered

company agents a choice of terms for procuring the powder. In one case the agent could "buy" the powder outright and then remit the amount agreed to by the two parties to the firm after he sold the powder.<sup>2</sup> This simply meant that the agent was charged a particular invoice price.

As an alternative the powder was not sold to the agent but rather was consigned to him for sale on a commission basis.<sup>3</sup> Generally, under this method, the agent sold the powder for a price and owed the firm that amount less a commission and other expenses as agreed to by the two parties.<sup>4</sup> The selling price an agent charged therefore had to include the agent's expected profit and any other expenses he might encounter. Treatment of warehousing and transportation costs varied in both cases depending on the amount of the sale, the location of the purchaser, and other circumstances as they arose. Thus, these additional expenses relating to gunpowder sales were not detailed separately, but were either included in the invoice or sales price of the goods, or charged to the recipient of the property. In either case, E. I. and other decision makers still determined, as much as possible, the selling price of the powder although they recognized over time that some measure of discretion had to be left to the agents.<sup>5</sup>

Initially, the record keepers credited all powder distributions directly to the "Factory" account. For direct sales to customers or company principals, this

constituted an accurate recognition of revenue from a completed earnings process, regardless of when the associated cash collection or fulfilled receivable occurred. Transfers of powder to agents for disposal on behalf of the company did not constitute a completed earnings process, however, and therefore should not have been credited to the "Factory" account until the agents sold the powder to a third party.<sup>6</sup>

The "Factory" account included more than just this revenue information, however. The record keepers also debited the "Factory" account for general operating expenses incurred in the operations of the business, specifically for the cost of using raw materials to manufacture the powder. The nineteenth-century record keepers did not call this "Cost of Goods Manufactured," as we would today. Nonetheless, when they debited the "Factory" account and credited the raw materials accounts to indicate the amounts used in the process of manufacturing the gunpowder, they accumulated this information.<sup>7</sup>

Company record keepers recognized that the premature crediting of the "Factory" account was invalid sometime in 1809, and at the end of the first partnership in December of that year Duplanty made an entry debiting a new account labelled "Gunpowder in the hands of agents" for the ending inventory, and crediting the "Stock" account.<sup>8</sup> New

account books dated January 1, 1810, did not need this kind of entry. The record keepers credited a new account labelled "Gunpowder" for shipments to agents, and debited the same account to recognize the actual sales of powder.<sup>9</sup> The offsetting credit to the "Factory" account occurred at this point.

In addition to debiting the "Factory" account for operating expenses, the record keepers also debited the "Profit and Loss" account. The "Profit and Loss" account included special expense information such as interest charges on renewed or retired notes and interest on invested capital.<sup>10</sup>

The record keepers also debited the "Profit and Loss" account on December 31, 1809, for "presumed depreciation in the value of our buildings and machinery in virtue of inventory made this day." They credited the "Factory Buildings" account for the same amount, presumably to recognize the results of the explosion which occurred in 1808.<sup>11</sup> The depreciation entry by name did not recur, although an additional entry to adjust the value of the account occurred at the end of the period under study.

Articles Six through Nine of the 1801 Act of Association stipulated that the profit or loss earned by the firm be identified on an annual basis.<sup>12</sup> Despite this stipulation, the closing process necessary to the identification of the firm's financial position and

therefore earned profit or loss occurred only five times during the period under consideration.<sup>13</sup>

The closing process meant that all debit balance accounts were credited, and the credit balance accounts were debited in the "Trial Balance." The balance account could either have been a separate location in the Ledger or the "Stock" account itself. The "Stock" account, initially debited and credited for the \$36,000 of capital investment originally anticipated by E. I., constituted essentially a summation or "Trial Balance" account itself at times. A debit to that account meant a loss, and a credit meant income.

The record keepers of the DuPont Company during the period under study did not need to incorporate extremely sophisticated techniques into the documentation process. They did, however, need to adapt existing procedures to meet the needs of a developing manufacturing firm.

## Notes--Chapter Four

- 1 These straightforward entries usually involved a small amount of powder, and were very rare. E. I. generally preferred that all customers go through one of his agents.
- 2 In many cases E. I. suggested one of these alternatives if specific circumstances warranted.
- 3 A commission expense generally not identified separately was recognized for agents at two-and-one-half percent of sales and was excluded from the price to agents to be remitted to the firm.
- 4 Depending on the location of the agent, and the agreement he had with the DuPont Company, transportation, warehousing and insurance costs might have been his responsibility.
- 5 In all cases, particularly in the very earliest days, E. I. maintained control of the price charged for the powder. Eventually, however, he was forced to allow more discretion to the agents in the field.
- 6 Further complicating this issue, if the powder was not sold, or was sold for a different value than the Invoice price because of a change in the market price of the powder, the earlier recognition was invalidated. Company record keepers never recognized this situation, however.
- 7 The raw materials accounts included saltpetre, brimstone, charcoal wood, and the cooperage account for barrels and kegs.
- 8 This entry effectively reduced the value of the costs attributable to the use of raw materials, and left what constituted cost of goods sold in the accounts.
- 9 Accession 500, Ledger, #935. Accession 500, Journal, #879. Ending inventory was debited to a "Gunpowder Outstanding" account.
- 10 The interest allocated to the investors at six-percent was adjusted on December 31, 1810, "because the

stockholders wish to be credited with compound interest." Accession 500, Journal, #879, folio 26.

11 Accession 500, Journal, #878, folio 60.

12 See appendix A.

13 December 31, 1809. Accession 500, Ledger, #934, folios 224-225. Accession 500, Waste Book, #862, folios 1-4.

June 30, 1814. Accession 500, Ledger, #935, folios 211-212. Accession 500, Journal, #879, folios 208-211.

December 31, 1814. Accession 500, Journal, #879, folios 264-267.

December 31, 1815. Accession 500, Ledger, #935, folios 213-214.

August 31, 1818. Accession 500, Journal, #880, folios 236-241.



## Chapter Five

### CONCLUSION

Accounting as a research discipline tends to focus on current research problems and disregard the rich history which predates the requirements developed from the Securities and Exchange Acts of 1933 and 1934. Such a delimited discipline demands analysis of historical data only as it pertains to the theoretical underpinnings of modern day accounting advances. Thus, accountants tend to ignore the fact that the great advances in theory they see evidenced today may not be as significant as modern day theorists would have us believe. The usefulness criterion has again resulted in adaptations in the practice of accounting to meet changing business environments, constructs, and forms. Basically, however, the fundamental practice of bookkeeping evidenced in the nineteenth century still applies.

In the nineteenth century, firms needed to adapt record keeping procedures to meet existing needs. Usefulness was the primary criterion which had to be accommodated, and the DuPont Company bookkeepers evidenced the realization of this criterion to a surprising degree. Even more surprisingly, the differences between the methods developed at the beginning of the last century to

accommodate certain needs, and those touted as incredible advances today do not seem very significant. Allowing for some of the limitations of the time, the differences are a matter of form instead of substance.

From the beginning, the DuPont Company record keepers had to adapt the bookkeeping practice that had developed to accommodate the needs of merchandising concerns to a manufacturing entity. The basic practices stayed the same, but the record keepers did have to somehow address the issue of raw materials used in the production process. They did this quite effectively. These nineteenth-century record keepers even went so far as to value what constituted "Work-in-Process Inventory," and recognized completion of this in-process powder in ensuing periods.<sup>1</sup>

Further, although there is no clear indication that the company record keepers or decision makers calculated the "cost" of the powder sold, aside from the valuation process recognized in the preceding paragraph, E. I. did recognize that fluctuations in the price of at least one raw material, saltpetre, influenced the minimum amount that could be charged for the final product.<sup>2</sup> They must have had some concept of the underlying costs, therefore, even though there is no clear indication of this fact. This is a fairly sophisticated concept for this period, just before the Industrial Revolution. It is certainly one that still challenges accountants to this day. The cost components

have grown that are being considered, but the concept of an underlying "cost" is still at issue.

The valuation of ending inventories of raw materials, finished, and unfinished powder occurred when a "Trial Balance" was generated. The five times this happened between 1801 and 1818 cannot possibly be considered "periodically" as modern day accountants expect from an organization. The early DuPont Company functioned in a different time, however. The production of these reports on an annual basis would probably be almost impossible. The company letter books are filled with requests sent to agents for information necessary to "close the books."<sup>3</sup> The uncertainty of the mails, the economic health of the agents in the field, and the market for gunpowder all served to make day-to-day operations difficult enough without aggravating the situation by tying up the decision makers in the firm with a closing process that often was not completed for several months. The usefulness criterion would justify the approach taken.

The depreciation entry of December 31, 1809, was used to value the operational assets of the business, in part because of the tendency of this particular enterprise to blow up from time-to-time. The firm never wrote assets up above the costs to build the facilities, but instead recognized that the value of the assets had decreased, because of "ware and tare."<sup>4</sup> In this case, the firm is

basically recognizing the true meaning of depreciation, loss of value, and very effectively documenting the fact that the assets involved had less value to the firm at the point that the "Trial Balance" was created. Although nineteenth-century bookkeeping does not take on the sophisticated, periodic allocation of the original value of a particular asset over its estimated useful life, the DuPont Company's approach does make the necessary adjustment to the asset account based on a very real loss of value.

One of the more important results of this research is the recognition that the earliest bookkeeping records of the DuPont Company do not necessarily reflect the underlying reality with respect to dates, dollar values, and events. Thus, when I came across essentially a reference book of basic information or "Statistics" on the company prepared during the mid-1950's as part of an anti-trust suit, I discovered that the DuPont Company Legal Department displayed purported financial statements for these earliest years. The first "Balance Sheet" was dated April 21, 1801, and indicated full capitalization based entirely on the first entry in the Journal.<sup>5</sup> The fact that this was not the case cannot be gleaned from a cursory examination of the extant primary materials.

The possibilities for future research on this subject matter are almost unlimited. I have only touched upon the

very first, formative years of the firm's existence. All materials are available to researchers for the entire nineteenth century and beyond, and the bulk of the materials have not been accessed. The concentration on the bookkeeping records instead of the information included in them has opened up an entirely new area of research in the DuPont Company archives.

Essentially, therefore, this research constitutes an historical case study of a particular firm and the accounting procedures adopted to deal with a unique set of circumstances. The techniques used in this case when no mandated or even suggested practices existed for a manufacturing firm cannot be generalized to apply to any other firms of this period. A researcher may seek similarities, but firms of this time must, essentially, be perceived as isolated situations unless some common decision maker influences more than one entity.

The DuPont Company remained viable during the nineteenth century despite an almost overwhelming set of circumstances. The record keeping practices of the firm, particularly after Duplanty introduced the essentials of double-entry bookkeeping, played an important role in the company's success. The usefulness criterion that caused record keepers to adapt existing procedures to specific needs fostered a valuable set of bookkeeping guidelines in

this firm that ensured the success of the company into the following century.

## Notes--Chapter Five

- 1 Accession 500, Journal, #879, folio 203. When the accounts were prepared for the "Trial Balance" on June 30, 1814, Duplanty made an entry for "G P unfinished in the mills @ 48 Cts" followed immediately by an entry "in the magazine ready pick up."
- 2 Therefore, for example, in a letter from E. I. to Dudley & Walsh, company merchants in Albany, he indicated that he wished "to keep our prices as low as the price of saltpetre can afford us." March 18, 1807. Accession 500, Letter Book, #773, folio 128.
- 3 A constant refrain throughout this period is evidenced in a letter from the firm to William Cornell in New York, where E. I. indicated that he wanted Cornell's account of sales, "our accounts being left open for want of that document." September 28, 1814. Accession 500, Letter Book, #776, folio 140.
- 4 Accession 500, Journal, #878, folio 60.
- 5 Accession 1729, DuPont Company Legal Department Records, pp. 2-1 to 2-9.

Appendix A  
THE DEED OF ASSOCIATION



A Deed of Association relative to the Establishment  
of a Manufactory of Gunpowder in the United  
States of America

The undersigned [Du Pont de Nemours Father, Sons and Co. of New York; Biderman; Catoire, Duquesnoy and Co.; and Eleuthère Irénée Dupont] wishing to establish a gunpowder manufactory in the United States of America have entered into partnership for that purpose, and have agreed as follows.

ART. 1<sup>st</sup>

The Stock of the Company shall amount to thirty-six thousand dollars, and shall be divided into eighteen shares of two thousand dollars each.

ART. 2<sup>d</sup>

The shares shall be subscribed for & paid by:

[	Bidermann for one share	one share
	Catoire, Duquesnoy and Compy	one share
	Necker-Germany	one share
	Arch <sup>d</sup> McCall	one share
	Peter Bauduy	one share
		one share
	DuPont de Nemours Father, and Sons and Co. of New York	twelve shares
]		

ART. 3<sup>d</sup>

The shares will bear Interest at the rate of six per cent.

ART. 4<sup>th</sup>

E. I. du Pont is entrusted with the establishing of the said factory, and superintendence of the same: his whole time shall be given to it, and as a compensation for the same, an allowance of eighteen hundred dollars shall be made to him every year.

ART. 5<sup>th</sup>

The requisite buildings and constructions shall be put up in the course of the year 1801 & during the beginning of the next year, so that the factory may be in operation in the summer of 1802.

ART. 6<sup>th</sup>

At the close of each year, beginning at the end of December 1803, an Inventory shall be made wherein the real and other property of the concerned shall be valued according to the actual price of the same, at the time of the said valuation. Shall be considered as a profit such part of the said valuation as may exceed the amount of the original stock, after having deducted the interest on the same. The house of Dupont de Nemours Father, Sons and Co. of New York--owning the best part of the shares will find one of its members or appoint some other person provided with a power of attorney to assist at the said Inventory.

ART. 7<sup>th</sup>

The profits or loss, if any, shall be divided in the following manner: eighteen parts to the owners of shares, nine parts to the chief of the manufactory, as his concern in the establishment created by him; and three parts are reserved for one of those who planned the undertaking.

ART. 8<sup>th</sup>

If it is not necessary to dispose of the three parts stated in Art. 7, they shall be suppressed.

ART. 9<sup>th</sup>

The Director of the manufactory and the agent appointed by the House of Dupont de Nemours Father, Sons & Co. will determine each year, after examination of the Inventory what is the portion of profit fit to be divided among the concerned.

ART. 10<sup>th</sup>

The Interest and dividend due to such of the concerned as live in France, shall be paid by such a house in Paris as will correspond to that effect with that of Dupont Father, Sons & Co. of New York.

ART. 11<sup>th</sup>

The Director of the manufactory will adopt for his accounts the principles adopted by the administration of powder & saltpetre of France.

ART. 12<sup>th</sup>

In Case the Director happens to die, the House of Dupont de Nemours Father, Sons & Co is authorized to settle his account with the company, to appoint another person to supersede him, and also to provide for all other requisite arrangements rendered necessary by circumstances not foreseen by these presents.

ART. 13<sup>th</sup>

The Term for the existence of this association is limited to the first January 1810.

ART. 14<sup>th</sup>

Each of the concerned shall declare prior to the 1<sup>st</sup> January 1809 whether his intention is to wighdraw from the association or to continue it.

ART. 15<sup>th</sup>

If the two-thirds of the concerned or more agree to renew the association, those who may wish to withdraw from it shall be reimbursed for the amount of their subscription & shares in the profits, as stated in the inventory of the 31<sup>st</sup> December 1809; and that payment shall be divided in three equal parts payable at three, six, & nine months from the date of their separation from the Company; each sum bearing interest at the rate of six per cent.

ART. 16<sup>th</sup>

If the two-thirds of the concerned don't agree to renew the association, E. I. Dupont will settle each and every account of the subscribers agreeable to the stipulations of the foregoing article.

ART. 17<sup>th</sup>

In either of the Cases provided for in Art. 15 & 16--the inventory of the 31 December 1809 shall be made by persons purposely appointed by the concerned parties, those persons to select an umpire, if necessary.

ART. 18<sup>th</sup> and Last

The present Deed of Association shall be considered as a legal title; and for that reason an authenticated copy of the same shall be delivered to each concerned.

Done in Paris the first floreal ninth year  
21<sup>st</sup> April 1801

[(Signed) Bidermann

(Signed) Du Pont de Nemours  
Father, Sons & Co.

Peter Bauduy

Catoire, Duquesnoy & Co.

Arch<sup>d</sup> McCall

E. I. DuPont

]

Longwood Manuscripts, Papers of E. I. DuPont de Nemours & Co., Group 5, Box 49, December 31, 1809. This is a translation of the original Deed of Association in Duplanty's handwriting, apparently done at the end of the first partnership. The information in brackets was crossed out on this document, although it appears in the original Deed of Association. The contents of the document have been altered to conform to current spelling, punctuation and capitalization norms for purposes of clarity. The substance of the original was maintained at all times.

Appendix B

ESTIMATED COST OF THE GUNPOWDER MANUFACTORY

Estimate of the necessary cost of the Powder factory

E. I. Du Pont

Price of land about 6,000Dollars, of which one third is cash.....	2,000
Machinery made in France.....	6,000
Advances to workmen coming from France.....	1,000
Dwellings for workmen.....	1,000
Refinery.....	1,500
Wheel mill.....	2,000
Composition and charcoal magazine.....	400
Stamping mill.....	2,000
Graining mill.....	1,200
Grainer and pressers.....	500
Glazing mill.....	1,000
Drying place.....	400
Dusting and packing house.....	500
Magazine.....	1,000
Fence.....	1,500
Director's home.....	2,000
	<hr/>
	24,000

Capital tree for the purchase of raw materials, for the construction of a second stamp mill, and the successive payments for the land.....12,000

"Estimate of the necessary cost of the Powder factory," undated. DuPont, Life, V:234.

Appendix C  
THE FIRST JOURNAL ENTRY

According to the first entries in this record book, the DuPont Company, as of April 21, 1801, was completely capitalized. Peter Bauduy recorded the capitalization of the firm in the first record book of the gunpowder manufactory as follows.

April 21, 1801  
Brandywine                      Powder Mills

Sundries to Stock \$36000 amount subscribed for to the end of establishing a Gunpowder Mills in the United States of America for the Joint account of the Subscribers under the direction of E. I. DuPont de Nemours agreeable to the contract signed this day by the said subscribers viz.

14	Biderman's account proper	1 share	\$2000	1
16	Duquesnois account proper	1 D <sup>o</sup>	\$2000	
20	Necker-Germany's account proper	1 D <sup>o</sup>	\$2000	
18	Dupont de Nemours, Father, Sons, & Company	15 D <sup>o</sup>	\$30000	
				36000

Stock to Sundries \$36000 concern of the subscribers viz.

15	To Biderman's account in Co. for his 1/18	\$2000	2
17	Dusquenois                      D <sup>o</sup>	D <sup>o</sup>	D <sup>o</sup>
21	Necker-Germany                      D <sup>o</sup>	D <sup>o</sup>	D <sup>o</sup>
19	Dupont de Nemours, D <sup>o</sup> Father, Sons, & Company	their 15/18	\$30000
			36000

Accession 500, Journal, #877, first written folio, not designated folio 1 by the bookkeeper.

1 The account Proper was the individual's account with the firm and included all transactions between the individual and the firm. Interest on invested capital as well as routine transactions were included in this account. The accounts of capital investors were the only ones annotated in this way.

2 The account in Company was the actual capital account for the investors in the firm. Only the capital transactions themselves such as the buying or transferring of shares were recorded here.



Appendix D

FIRST AGREEMENT WITH PETER BAUDUY

Articles of agreement between the firm Du Pont de Nemours Father, Sons & Co. of New York acting in accordance with Article 12 of the agreement made in Paris on April 21, 1801, for the establishment in America of a manufacture of Powder, Eleuthère Irenée Du Pont, director of the manufacture, and Peter Bauduy of Wilmington.

Article 1. Peter Bauduy agrees that from the date of the signing of this agreement he will use every means in his power as well as his knowledge of this country for the manufacture and for the buildings now being constructed on the Brandywine.

Article 2. Peter Bauduy agrees to give all his time from May 1 to December 1 in each year to whatever service the manufacture may require--whether for purchasing raw material, selling powder, establishing agencies and magazines in the interior of the country, journeys, adjusting accounts with dealers, &c.

Article 3. Peter Bauduy will give his endorsement and his credit at the Bank of Wilmington for such sums as the Manufacture may require if the payments for its shares are not sufficiently prompt to meet the expenses; and it is understood that all such sums are guaranteed to him individually by the Manufacture.

Article 4. As indemnity for the efforts that Peter Bauduy agrees to make for the service of the manufacture and also for the use of his credit with the Bank in case of need, he shall be allowed the three parts of the profits that are not disposed of according to Article 7 of the original agreements and also a Commission of 2 1/2% of the product of the sale of all Powder made by the Manufacture.

Article 5. The expenses of any journeys that the business of the Manufacture may require shall be repaid to Peter Bauduy--for himself and his horse.

Article 6. The indemnities and profits allowed Peter Bauduy shall not be paid unless he continues to fulfill the engagements agreed to in Articles 1, 2 and three of this Agreement.

Made at Wilmington, August 25, 1802.

By power of Attorney from DuPont de Nemours Father, Sons  
& Co. now established in Paris,

V. du Pont de Nemours & Co.  
E. I. du Pont de Nemours  
Peter Bauduy

Articles of Agreement with Peter Bauduy, August 25,  
1802. DuPont, Life, VI:108-9. I have translated the name  
of the firm, DuPont de Nemours Father, Sons & Co., from the  
French, DuPont de Nemours Père, Fils & Cie. It is an exact  
translation.

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## ANNOTATED BIBLIOGRAPHY

Primary Account Books.The Blotters.

Hagley Museum and Library. E. I. DuPont de Nemours & Company Records. Accession 500, Series I, Blotters, 1800-1818.

Blotters were generally considered the books of original entry for transactions. Information relating to such transactions was recorded in these volumes in a rough form for later transfer to other account books. The emphasis was placed on adequately documenting the event. The correct entry form was added in other record books. Not all the volumes categorized as Blotters by the Manuscripts Department of the Eleutherian Mills Historical Library (now Hagley Library) were used for this purpose, however. Where other functions existed, the volumes have been identified accordingly.

1. No. 848. Blotter (Factory Building Book), 1800-1807.

The Factory Building Book was not a Blotter. Rather, it was supposed to be used as an expense book for the period of time during which the production facilities were being built. The record keepers continued to use this volume long after the production process was in operation, however. Use of the Factory Building Book as an active account book did not cease until December 31, 1807. The record keepers did not maintain the volume in a Debit and Credit format. They simply listed several individual expense items under the overriding heading "Manufactory Dr. to Cash for Sundries." The dates were not specific, nor was there a running balance maintained. The initial record keeper was Peter Bauduy. As of February 11, 1806, the bulk of the information amassed in the Factory Building Book was entered in the appropriate Journal by Raphael Duplanty. Accession 500, Blotter, #848, folio 52. Accession 500, Journal, #877, folio 71. He seemed to function as something of an internal auditor for this volume in that the individual entries included numerous annotations in his handwriting that indicated

corrections or amendments to information contained therein. This leather covered volume was stenciled "Ledger" on the binding. The volume was extensively repaired and the stenciling may have been part of the original spine, or it may have been added at the time of the repair. In either case, this volume was not used as a Ledger. The covers of this volume were completely reattached. The original sewing was still intact, although some additional work was done on the stitching. The folio numbers remained consecutive, however, so it would appear that internal integrity was maintained despite the extensive repairs.

2. No. 849. Blotter (Day Book), 1804-1813.

Company record keepers did not use this volume as a Blotter, and it was not even one continuous record. Instead, the record book actually consisted of three completely different, unrelated records. The term Day Book, added by the Manuscripts Department of the Eleutherian Mills Historical Library (now Hagley Library), does not really seem to apply to any one of these. Both Peter Bauduy and Raphael Duplanty maintained this volume at various times from November 1800 to about April 1813. One document in this volume beginning November 20, 1800, was initially a duplicate of the Factory Building Book although less detailed. It was located at what appears to be the beginning of this record book, and it was maintained by Peter Bauduy. Beginning with September 15, 1802, the volume included only the entries from the Factory Building Book which were annotated with the initials "PB" for Peter Bauduy, apparently indicating items he had paid for that were subject to reimbursement by the firm. The last entry in this particular record was dated July 9, 1805. If the above document was located at the beginning of this volume, then in the back of the volume and upside down was another document, the first record of the company's powder sales. It was maintained by Peter Bauduy and only covered the period from the date of the first powder sale, May 16, 1804, to January 14, 1805. The primary function of the volume was documented in the middle of the book. These records were kept by Raphael Duplanty, and constituted the first payroll record, or "Petit Ledger," for the firm. There were individual payroll accounts including, generally, the dates of entry, employment, wages owed, time of employment, and sums paid out in cash or to others for: turnips, rum, doctor's bill, pork, flour, extra boarding, and so on. There were format changes from time to time, but essentially the

same information was documented. Entries in the workers' accounts continued through April 1813. The accounts in this volume were continued in the next Petit Ledger. (Petit Ledger, #961, not included in Annotated Bibliography) All of the volume was used although in light of the limited use of other volumes during the same time, it seems unlikely that austerity measures required the three uses of this book. This volume was extensively repaired and rebound. There is every indication that great care was taken at all stages to ensure that the internal integrity of the documents was maintained. There is therefore no reason to suspect that the volume was not returned to its original state, with three documents included in one book. The volume has a decorative paper cover with a new leather spine and leather corners.

3. No. 850. Blotter (Factory Book), 1804-1810.

The primary purpose of this volume called the Factory Book was to pick up the record keeping from the Factory Building Book after the manufactory had been built, and powder was being sold. It also contained more than one document. The period of time covered by this book was May 19, 1804 through June 1810. The first document in this volume was entered under the title "Statement of the Different Sums Paid by Iren'e Dupont towards the Manufactory." Accession 500, Blotter, #850, folio 1. It began on May 19, 1804, and concluded on December 31, 1805. The information indicating what happened, the date, and the amounts involved was entered sequentially by Peter Bauduy, and continued through folio 15. The total for this period was Debited to the account of E. I. DuPont in an entry in the Journal on February 11, 1806, and the source record book was identified as the "Factory Expenses Book." Accession 500, Journal, #877, folio 71. The next document in this volume was the actual Factory Book and began on folio 16. The first entries in the Factory Book for the balances from 12/31/06 and 12/31/07 indicated that the entries for this period were "Paid in the Course of this year as per minute a/c in factory building book thro' mistake." Accession 500, Blotter, #850, folio 16. The real entries in this document began on January 1, 1808, and extended through the beginning of 1810. They were basically one line entries, with the date, the nature of the expense and the dollar value of the transaction. The whole volume seemed to fall into disuse about June 1810. Information from the Factory Book was carried to two Journals for the period ending December 31,



1809. Accession 500, Journal, #877, folio 230.  
 Accession 500, Journal, #878, folio 45. The information for the beginning of 1810 apparently was not included in the Journal. The Factory Book is in much the same condition as the Factory Building Book. Accession 500, Blotter, #848.

4. No. 851. Blotter, 1806-1808.

This volume was maintained by both Raphael Duplanty and Peter Bauduy, but primarily by the latter. It covered the period from February 27, 1806 to December 31, 1808, and conforms to the definition of a Blotter. It therefore included a chronological listing of the events that affected the firm and was the book of original entry for this period. The individual entries were very rough, but they did identify the accounts and dollar values for each transaction. Separate entries were annotated with x's, apparently indicating that the bookkeepers followed some kind of an organized posting process. This information was probably posted to the appropriate Waste Book, which is no longer extant. On December 31, 1808, the x's disappear, and for the remaining few pages of the volume the entries were annotated with the Ledger folio numbers in the handwriting of Raphael Duplanty. Accession 500, Blotter, #851, folio 142. This was the process followed in the company Journals of this period. There were also annotations to the effect "Ent<sup>d</sup> in Journal" in Duplanty's hand in these last pages, evidence of a sort of internal auditing function performed by Duplanty. Accession 500, Blotter, #851, folio 142. This book appears to be in its original condition. The original sewing is still intact. The volume has a decorative paper cover with leather corners and a leather spine. On the cover in the handwriting of the bookkeeper, Raphael Duplanty, is the notation "Blotter feb<sup>y</sup> 27 1806 to Dec<sup>r</sup> 1808."

5. No. 852. Blotter A, 1809-1810.

This volume was labeled Blotter A by the library. It is not clear why the A was added, although on the front of the volume, in the handwriting of Raphael Duplanty, is the annotation "N<sup>o</sup> 2" and "1809 AA" with no additional explanation. This volume was maintained by both Raphael Duplanty and Peter Bauduy, although primarily by the latter. It covered the period from January 2, 1809 to December 31, 1810, and directly succeeded the previous Blotter. There were two

documents in this volume. What passed initially for the front of the volume was actually a six-folio hodgepodge of summarized information on the firm's dealings with the U.S. government from 1811 through 1814. Unfortunately, the middle part of the book was removed, and there is no way to tell if any information was lost. The primary document in the volume is in the back of the book from the entries mentioned above, and upside down. The volume has experienced a great deal of repair, but appears intact, nonetheless. The text block was reattached to the marble paper covers of the volume, with new leather on the spine. The corners of the covers were reinforced with leather. The spine was subsequently lettered "Blotter Day Book No 2" with the dates "January 2, 1809--December 31, 1810," annotated there as well. It is possible that the cover of this volume was reattached upside down. Nonetheless, the internal integrity of the documents has been maintained, and can be verified from the consecutive numbering of the pages as practiced by the company record keepers.

6. No. 853. Blotter, 1814-1817.

Record keepers used this volume as a straightforward Blotter. It was maintained by several different record keepers, although the only one that can be identified was Bauduy who started the volume. It covered the period from July 1, 1814 to June 30, 1817. There is no explanation for the gap in the Blotters from December 31, 1810 to July 1, 1814, although the intervening period may have been covered by a Blotter that is no longer extant and not mentioned in the other record books. This volume is covered in marble paper. It has leather corners, and a leather spine. The original sewing is still intact and the volume shows no evidence of repair.

7. No. 854. Blotter, 1817-1822.

This volume covered the period from June 2, 1817 to December 30, 1822, although record keepers used it as a Blotter for only part of this period. It was maintained by several different record keepers, although the only one who could be identified was Raphael Duplanty. Parts of the first and second folios appear to be a continuation of the previous Blotter. Beginning with the first folio one occasionally sees the notation "PL" before the entry. This denotes the Petit Ledger, and the information can be traced

to the appropriate Petit Ledger folio number. Over time these entries appeared to be more and more prevalent and eventually the volume became primarily a support document for the Petit Ledgers although there were, occasionally, Waste Book notations. Duplanty again performed an internal audit function. The volume is in its original condition. The covers are marble paper, with leather corners and a leather spine. There has been no repair work.

### The Waste Books.

Hagley Museum and Library. E. I. DuPont de Nemours & Company Records. Accession 500, Series I, Waste Books, 1810-1818.

The Waste Books were the books of original entry for transactions if no Blotter existed. The entries in these volumes were more formalized than the Blotter entries and the information was posted from the Waste Book to the appropriate Journal. One Waste Book is no longer extant. All volumes in this category for this period were used as Waste Books, and referred to as such in other account books.

#### 1. No. 862. Waste Book B. 1810-1816.

The first volume in the library's category Waste Books was labeled B. There was a previous volume, presumably Waste Book A, referred to in the Journal which is no longer extant. Accession 500, Journal, #878, folio 13. This volume was maintained by many different record keepers, including Duplanty. It covered the period January 1, 1810 to October 31, 1816. The beginning date was the date when a new Ledger was started. Accession 500, Ledger, #935. This volume was organized chronologically and followed a general entry format. The entries in the Waste Book were checked, presumably to indicate a posting notation when the information was transferred to the appropriate Journal. The very beginning of this volume included a detailed Inventory of all amounts owned offset by amounts owed and invested including cash, property, receivables, payables and all of the material goods of the firm. This volume is leather covered. It has experienced little repair work. Apparently the text block may have come loose from the leather spine, and may even have completely fallen out of the cover. This has been replaced inside the original covers which have

been reinforced inside. The integrity of the document has been maintained, however, as the original sewing is still intact. The corners of the covers and the head of the spine were reinforced with leather.

2. No. 863. Waste Book C, 1816-1818.

The second volume covered the period November 2, 1816 to August 31, 1818, and directly succeeded the previous Waste Book. This volume is leather covered. The head and tail of the spine have been repaired. The text block has been reinforced at the inner joint and has been glued to the spine. The cover has been reinforced at the corners more recently. The integrity of the account book has been maintained.

The Journals.

Hagley Museum and Library. E. I. DuPont de Nemours & Company Records. Accession 500, Series I, Journals, 1801-1818.

The Journals included the same information found in the Waste Books and Blotters, although the chronological listing of the entries was not always maintained. Accounts included in the Journal entries were annotated with the appropriate Ledger folio numbers. All four volumes in this category qualify as Journals.

1. No. 877. Journal A (Day Book), 1801-1808.

This was the first Journal for the firm. The book covered the period from the date the original partnership was formed, April 21, 1801, to December 31, 1808. The Journal was maintained by Bauduy until February 11, 1806, after which Duplanty made some of the entries. Each entry in this volume was annotated with the Ledger folio number in the handwriting of Raphael Duplanty. The book covers and spine are covered in leather, but the volume is in generally poor shape. No repair work was done on this record book. The front cover and first two blank pages are off completely and approximately two-thirds of the text block is almost completely severed from the rest of the volume. One blank section at the back of the volume is completely out. The volume's integrity is maintained, however, because a few original threads still hold the contents very loosely together. Additionally, each

page is sequentially numbered and there is no inordinate break in the sequence of dates. The pages, though somewhat stained, tattered and faded are all legible.

2. No. 878. Journal B (Sales Book), 1809-1810.

This volume directly succeeded the previous Journal. It was maintained by Duplanty and covered the period January 1, 1809 to December 31, 1810. Only about one-third of the volume was used to record the information. The volume has experienced no repairs. The original sewing is loose, but still intact and the volume has retained its integrity. The purpose of this apparent duplication of information cannot be determined.

3. No. 879. Journal "B," 1810-1816.

This was the third Journal, although it was labelled with a B. The volume was maintained by Raphael Duplanty and by other record keepers who cannot be identified. This account book covered the period from January 1, 1810 to May 31, 1816. It covered the same period in 1810 as did the previous Journal although why the information was included in both account books is not clear. Duplanty appears to have maintained his function as internal auditor for the firm. This book is leather covered and has been repaired. The spine has been rebacked with leather, with the original spine glued back over the new one. The text block has been completely reattached. The individual sections were re sewn, but were still consecutive, so one can assume that the book has retained its integrity. Leather corners have been used to reinforce the book on the front and back. The entire volume has been used.

4. No. 880. Journal "C," 1816-1818.

The volume was maintained by Raphael Duplanty and by other record keepers who cannot be identified. It covered the period May 31, 1816 to August 31, 1818, and directly succeeded the previous Journal. The record keepers deviated from the standard day-to-day entry format, however. They seemed to be trying to organize the material in a different way, possibly so that the posting process to the Ledger would be facilitated. At first, the Debit part of each entry was included under

an overall heading and totaled. The same thing was then done to the Credit entries. Initially, efforts were made to identify the debits or credits in different transactions for a particular account, and post them at one time. Over time the rigor of this practice diminished. Toward the end of the volume a few pages of such information were included at a time, so that there were many groups of Debit or Credit entries for the same account. This volume is leather covered. The text block has been completely reattached. The spine has been rebacked with leather, with the original spine glued back over the new one. The individual sections were resewn, but were still consecutive, so one can assume that the book has retained its integrity. Vellum corners have been used to reinforce the book on the front and back.

### The Ledgers.

Hagley Museum and Library. E. I. DuPont de Nemours & Company Records. Accession 500, Series I, Ledgers, 1801-1818.

The account information in each Journal entry was posted to the appropriate folio location in the Ledger. The significance of the debit or credit balance in each account after all entry information was posted depended on the nature of the account. The account balances accumulated in the Ledger were occasionally closed, and used to prepare Trial Balances. The Trial Balance served to identify the Profit or Loss for a particular period. The three volumes in this category qualify as Ledgers.

1. No. 934. Ledger "A," 1801-1810 with separate index.

This was the first Ledger. The volume was maintained by Raphael Duplanty and covered the period April 21, 1801 to 1810. In all likelihood Duplanty started this volume after completing the internal audit he performed in February 1806. The official ending date for this Ledger was December 31, 1809. The books were officially "closed" on this date, and a Trial Balance listing all Debit balance accounts first and totals, and then all Credit balance accounts and totals was drafted. Accession 500, Ledger, #934, folio 224. A resulting Debit balance meant a Loss, and a Credit balance meant a Profit. Certain 1810 entries were nevertheless included in this volume. This volume was

maintained so that the left hand page constituted the Debit page, and the right hand page constituted the Credit page. Each entry was annotated with both the Journal folio number where the original entry was located, and the corresponding Ledger folio number(s) where the offsetting account information could be found. This is a leather covered account book which is in remarkably good condition. There has been some repair work on the volume, but the integrity of the material has been retained. The text block has been reattached and the spine has been rebacked with leather.

2. No. 935. Ledger "B," 1810-1816.

This volume directly succeeded the previous Ledger and was maintained by Raphael Duplanty and several other unidentified record keepers. It covers the period from January 1, 1810 to December 31, 1816. Where 1810 information was recorded in the previous Ledger, no duplication occurred. The accounts that stayed open in the preceding Ledger were simply posted to this Ledger at a later date. In this volume Debits and Credits were recorded on one folio divided by a line drawn down the center of the page. This volume included two Trial Balances. The first of these was dated June 30, 1814. Accession 500, Ledger, #935, folio 211. The second one was dated December 31, 1815. Accession 500, Ledger, #935, folio 213. There was no Trial Balance when the ledger was closed on December 31, 1816. Instead, each account was simply closed to its new account in the succeeding Ledger, but the information was not compiled anywhere. This volume is leather covered. The text block has been resewn. The corners were repaired and the spine has been rebacked with leather.

3. No. 936. Ledger "C," 1816-1818.

This volume directly succeeded the preceding Ledger, and was maintained by Raphael Duplanty and a number of other unknown record keepers. It covered the period from January 1, 1816 to August 31, 1818. The account format remained the same. The volume has undergone extensive repair. The text block was reattached. The spine was rebacked with leather and protective vellum corners were attached to the covers. Although the sections of the text block were resewn, the integrity of the volume was maintained.

## Secondary Account Books.

### The Cash Books.

Hagley Museum and Library. E. I. DuPont de Nemours & Company Records. Accession 500, Series I, Cash Books.

The Cash Books included information on cash disbursements and outgoing checks only. No receipts of cash were documented in these volumes. Two volumes cover the period under consideration, but as these are not primary record books for the DuPont Company, only one representative volume is included here.

#### 1. No. 1035. Cash Book, 1810-1813.

This volume was maintained by Raphael Duplanty. It covered the period from January 1, 1810 to December 31, 1813. Each page includes cash or check information under several columnar headings. Thus, there is a category for amounts paid in cash, amounts charged in accounts current, and others for the accounts of E.I., Peter Bauduy, the woolen factory called DuPont, Bauduy & Company, and for the gunpowder factory. These amounts were broken down between wages and bills. These columns changed somewhat during the period in question to reflect changes in the firm. The information in this Cash Book was posted to the appropriate Journal at the end of the month. This volume was actually four, separate, paper-covered booklets bound together with a plain paper cover. Raphael Duplanty's handwriting appears on the front and the spine of the bound volume which was marked on the spine "CB A" and "Cash Book A Jany 1, 1810 to Dec<sup>r</sup> 31<sup>st</sup> 1813," and on the front "Cash Book Jan<sup>y</sup> 1<sup>st</sup> 1810 to Dec<sup>r</sup> 31<sup>st</sup> 1813." It does not seem to have been handled much after the booklets were bound.

### The Accounts Current.

Hagley Museum and Library. E. I. DuPont de Nemours & Company Records. Accession 500, Series I, Accounts Current.

The Accounts Current volumes contained information on very active accounts, as well as serving in some cases as Memorandum Books. Several volumes qualify as Accounts



Current. The first of these volumes is considered representative of this general category of subsidiary record book.

1. No. 1064. Accounts Current (Cash Book), 1804-1808.

This volume contains separate accounts bearing the names of some of the individuals who were prominent agents of the firm during this period. The handwriting in this volume belonged primarily to Raphael Duplanty. This volume covered the period December 20, 1804 to sometime in 1808. It was difficult to interpret, primarily because it included a veritable hodgepodge of different items. A lot of the interpretation that goes along with this volume seems to depend on which folio and account within the volume one is dealing with at the time. In keeping with the primary purpose of this volume, it included a detailed account of the state of exactly what the firm owed to certain individuals and what those same individuals owed to the firm. In most cases the amounts and configuration differed from the Ledger, but many individual items may be traced to the Journal and from there to the Ledger. There is no formal annotation to determine this, except for correlation of the dated transactions in the Accounts Current with the same information either at the same date, or some close date, in the appropriate primary account books. Within this volume references were made to individual Accounts Current which were sent by the various agents. This coincided with the information in the letters which constantly referred to the need to receive these accounts, or reports, from the various agents throughout the country. There was also a reference in this volume to efforts to reconcile the information received from the various agents with the information maintained by the firm. One such entry stipulated that there was an "Error which it appears we have committed in making the above extracts from their accounts which makes our a/c agree with theirs." Accession 500, Accounts Current, #1064, folio 8. This volume also seems to have been used to maintain the Accounts Current of the various shareholders in the firm. Additionally, there were references to certain firms with which the principals in this firm had close ties. These included Bauduy, Garesches and Company, and Dupont, Bauduy and Company. This volume appears to be intact, but its condition is not good. The textblock is not sound. Most of the sewing is gone. Of the original cords, very few remain. There are, however, no evident gaps in the material. There is

some danger with this volume, however, that parts of it may be lost.

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