## STRATEGY AND STRUCTURE: THE DU PONT COMPANY'S SALES ORGANIZATION, 1870 - 1903

The period of unprecedented industrial growth and prosperity after the American Civil War encouraged aggressive competition thereby heightening the uncertainty and instability of business enterprise. To enter new markets successfully and to sell both staple merchandise and recently developed products profitably, entrepreneurs devised new administrative structures within their companies and organized trade associations among their companies. The rise of the Western and mid-Western markets and the development of smokeless powder and dynamite after the Civil War challenged the established marketing practices of the powder industry. A study of the marketing practices of the E. I. du Pont de Nemours Company from 1870 to 1903 reveals that this company met these challenges by consolidating its internal sales organization and by participating in the Gunpowder Trade Association.

The powder market expanded rapidly during the last quarter of the nineteenth century because of the exploitation of natural resources in the middle and western sections of the United States. In the 1880's lumberjacks in Michigan, Wisconsin, and Minnesota reached a peak in the use of blasting powder to blow the crowns from the trees. As the population pushed westward clearing the land of stumps and boulders and laying roads in order to settle permanently on farms, the demand for powder increased The increased output of such mining industries as iron, copper, silver, lead, and nickel stimulated the use of powder. An index of physical production in mining based upon ten metals, coal. and petroleum shows almost a five-fold increase in production between 1879 and 1900. The development of the soft coal fields in Iowa, Indiana, western Kentucky, Missouri, Colorado, and Wyoming, and the near doubling of coal production in Illinois between 1880 and 1890 typify this rapid growth. The construction of a national system of railroads founded on four transcontinental routes required large amounts of powder. The military also ordered quantities of gunpowder for Indian fighting and the Spanish-American War

While the market grew, so did the number of products. The major technological advance was the perfection of Alfred Nobel's dynamite which was first produced in America by the Giant Powder Company in 1868 Overcoming such severe setbacks as explosions, deaths, patent litigation, public prejudice, and the full weight of the black powder industry's opposition, the high explosives trade successfully invaded the mining and transportation markets largely because of its superior blasting quality. Experimenters such as Francis G du Pont finally developed a marketable smokeless powder in the 1890's which eliminated the two disadvantages of black powder, smoke and dust, that had stymied the use of long-range rapidfire rifled guns. The Spanish-American War greatly stimulated this aspect of the powder trade

Du Pont's first method for bringing stability to the powder business and for extending its share of the market was by participating in the Gunpowder Trade Association. After the Civil War the larger producers of the industry faced competition from a number of small mills organized during the war to supply the needs of local consumers. This increase in producing units coupled with the surplus powder in government storage — and sold at auction — meant an excessive supply. Vicious compettition resulting in lower prices, and reduced profits naturally followed. William Barclay Parsons as acting president of the Laflin Powder Company in 1867 proposed a secret price agreement as protection against ruinous price cutting. At this time the du Ponts expressed little interest in such an arrangement.

With the consolidation of the various Laflin, Smith, and Rand powder mills under one management, and the continuing unfavorable business conditions, several of the key mill owners decided to try industrywide control of the market. Meeting at the New York office of the Du Pont Company in April, 1872, representatives of six powder companies drew up the Articles of Association for the Gunpowder Trade Association of the United States. This group established minimum prices and individual company quotas for each of the major powder markets, organized a Council to settle all complaints concerning rules infractions, and decided to assess members according to the number of votes each had in order to raise operating funds. The Council gradually devised rules for agencies and salesmen and changed the prices to meet new trade conditions. By 1876 the Council had discovered that the absence of any real enforcement machinery permitted members to violate the agreement; consequently, the Council established a system of trials and penalties for violators. This system of minimum prices, sales quotas, regulation

of trade practices, and penalties for violations, although occasionally modified, continued for the remainder of the nineteenth century as the fundamental marketing policy for the industry.

The Gunpowder Trade Association met the challenge of small local competitors in several ways. The organization usually began by an aggressive campaign of cutting prices and flooding the market with products of members. The trade association allowed reductions in price to compensate for higher transportation costs arising from the fact the members' mills were usually farther away from the market than local independent mills. Even with these concessions, a few of the smaller firms like the Lake Superior Powder Company continued to undersell the Gunpowder Trade Association. When this occurred, the members tried to purchase the competing mill. If this failed and the marketing practices of the competitor still annoyed the association, the members changed tactics and began to solicit the cooperation and friendship of the smaller concerns by granting them membership in the trade association or by entering into sales agreements with them. These arrangements established territories of "spheres of influence" in which only certain specified companies could market powder. By either completely eliminating competition or by minimizing its influence, the Gunpowder Trade Association was able by the late 1880's and early 1890's to stabilize the industry to a level which had not existed since the Civil War.

Although the larger members of the trade association fostered the idea that all concerns were treated fairly, the surviving records indicate that the stronger firms, and especially the Du Pont Company, dominated the association Proportional representation based upon size insured a ruling voice for the larger members who also controlled all offices and committees. In private correspondence officials such as Lammot du Pont admitted that the association was "only another name for du Pont and Company"

Du Pont's second method for bringing stability to the powder business was through modifications of the company's internal sales organization. Since the establishment of the du Pont powder mills along the Brandywine River in northern Delaware during the first decade of the nineteenth century, the company had marketed powder through direct sales at the factory or by a system of agents who either purchased the goods outright or sold for a commission (usually the latter). Even though other members of the du Pont family participated in the management of the business, the senior partner firmly controlled distribution. First the founder Eleuthère Irenée, then his successor from 1837 to 1850, Alfred Victor, and finally Henry du Pont after 1850, carefully scrutinized the marketing practices of individual agents. In the Civil War era, the du Ponts began employing a few salaried agents who worked exclusively for the company; however, the basic marketing methods of the company remained unchanged during the first three-quarters of the nineteenth century.

The two principal types of distributors after 1870, the company representative receiving a salary, and the company agent earning a commission, performed a wide variety of functions. Although the necessary activities of managing the office, supervising sub-agencies, drafting the daily correspondence and quarterly reports to the Brandywine office, purchasing and then maintaining such company property as the office, stables, and powder magazines, and arranging suitable transportation including substantial rebates required considerable time and effort, agents and representatives were primarily concerned with sales since this was their livelihood.

The Du Pont Company's distributors utilized various methods of selling. The easiest was the filling of orders which the sub-agents sent in to replenish their supplies. The walk-in trade in such large markets as St. Louis, Chicago, and New York where various companies vied for orders became very competitive. A third method of selling was the traveling salesman who, as the agent's assistant, visited established consumers such as coal companies which regularly bought large quantities of Du Pont Powder or entered areas where the competition was extremely keen and the Du Pont Company had no regular business. Agents and representatives used the traveling salesman as the pulse through which they could feel the business tempo in their territory.

The rising pressure to sell caused by the unstable market forced some of the Du Pont powder distributors to invade the territory of other Du Pont agents. Representing several companies, commission agents cared little which brand of powder they sold or in whose territory they solicited trade. The correspondence of these men indicates an amazing degree of detachment from their supplier. The salaried agent, however, as a

"company" man usually tried to serve his employer in the best manner possible since his income depended directly upon the company. The lack of control over the more independent commission agents and their conflicting interests became increasingly apparent in the 1880's. During the reorganization of the company following President Henry du Pont's death in 1889, the new management decided to consolidate the agencies by eliminating many of the small inefficient sub-agencies and by replacing some of the commission agents with salaried company representatives.

Even with such internal changes as the elimination of several commission agents and the creation of an industry-wide trade association, the marketing activities of the Du Pont Company lagged behind those of some of the dynamite makers. Beginning in late 1892, J. Amory Haskell, the new president of the Repauno Chemical Company, and Hamilton Barksdale, its secretary, completely reorganized the distributing practices of this company. Gradually Haskell placed all agents in key locations on a salary and then demanded their complete cooperation and allegiance. In order to determine the nature of their business and to control their activities more closely, the president instructed agents to submit two types of reports - slow and trade The monthly slow reports contained a listing of all delinquent accounts. Through the trade reports which the agent filed on each prospective customer whom he visited, Haskell could ascertain how many calls an agent was making, the type of competition he was encountering, the types of dynamite that the client found most useful, and the sales record of the agent. Relying heavily on these reports, Haskell warned all salesmen that accurate and complete reports were as essential as sales. The officials of Repauno conducted experiments, organized product demonstrations, and wrote descriptive catalogues to provide the agents with information about their products. Haskell sent men educated in the technical aspects of explosives to help customers use dynamite properly. The company furnished salesmen with such advertising tools as samples, booklets, and blotters for distribution to potential customers and regular clients. Developing the strategy of carefully analyzing the market in order to determine the most successful products, of educating both the agents and public as to the proper use of the products, and of employing a sales structure built around salaried agents, the Repauno Chemical Company after 1892 experienced a rapid expansion of sales.

Following the death of the senior partner, Eugene du Pont, in February, 1902, and the subsequent reorganization of the ownership and management of the Du Pont Company, the new owners decided to purchase its strongest competitor, the Laflin and Rand Powder Company. This brought J. Amory Haskell, who had become the president of Laflin and Rand in 1895. into the management of the Du Pont Company as vice-president in charge of sales. By the end of 1903, the sales strategy and structure of the firm had undergone substantial change largely along the lines of experience at Repauno with persons who had previously worked at the dynamite plant occupying key positions in the new sales department. Although the consolidation of the sales organization and the trial and adoption of new sales techniques continued for several years, the Du Pont Company continued to use the basic centralized marketing framework begun in 1903 until product diversification forced the company to develop a decentralized structure after the First World War.

The manuscript collections of the Eleutherian Mills Historical Library contain most of the primary source materials for this paper. The incoming business correspondence of the Du Pont Company reveals much about the operation of the sales organization. Such collections of personal papers as those of Francis G. du Pont, Henry A. du Pont, and Hamilton Barksdale furnish an insight into the thinking of various members of management. Other groups of business records, especially the outgoing correspondence of the Repauno Chemical Company, indicate the changing sales techniques of the more progressive companies. The library also has the minutes of the Gunpowder Trade Association, a large collection of trade agreements, and the company records of many of the members.

The testimony and exhibits at two court cases, *United States* vs. E. I. du Pont de Nemours and Company and United States vs. Du Pont, General Motors, et al provide additional information.

A researcher thus finds a wealth of unexplored material concerning the nineteenth century operations of one of today's industrial giants and the strategy and structure of its sales organization from 1870 to 1903.

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