

**FRENCH PHARMACY / BERMAN COLLECTION<sup>1</sup>**  
**Collection 108**



Biographical Note

Alex Berman (1914 – 2000) obtained his Ph.D. in the history of pharmacy, medicine, and science at the University of Wisconsin in 1954. Prior to obtaining his doctorate he worked as a community and hospital pharmacist and served in World War II as a military pharmacist. Dr. Berman taught at several universities, including the University of Cincinnati where he served as professor emeritus of history and historical studies in pharmacy. In addition to his influential articles on the American botanics, he has also written extensively on the history of French pharmacy, studies supported by a Guggenheim fellowship (1958-59), and grants from the National Science Foundation and the National Library of Medicine. Dr. Berman is also recipient of the prestigious Kremers Award given for excellence in the history of pharmacy in the United States by the American Institute of the History of Pharmacy.

Physical Description

The collection consists of 383 folders, 113 dealing with various aspects of French pharmacy, stressing especially the role of the French pharmacist as scientist. The remaining 270 folders are devoted to biographies of distinguished French pharmacists notable for their scientific or professional contributions. Materials are part of a life-long effort to document the history of phenomenal pharmacists in France, especially the 19th century.

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<sup>1</sup> Berman's private papers comprise the Archive Collections #14

## Utility

The collection will be available to qualified scholars interested in the history of French pharmacy, medicine, or science and possessing a reading knowledge of French.

### Historical Précis (1777-1900)

#### 1. ANTECEDENTS

Two dates that are most significant in the corpus juris of 18th and 19th century French pharmacy are 1777 and 1803. After three centuries of intermittent hostilities, the uneasy alliance with spicers was finally broken, and the apothecaries of Paris emerged in 1777 as a powerful corporate body--the Collège de Pharmacie. This development reflected a cumulative growth in professional, scientific, social and economic stature. A new image of the pharmacist as a learned professional person was fashioned as he succeeded in disengaging himself from his pejorative 17th-century role as an "infirmière de boutique" who administered clysters. But perhaps the most important feature of this professional growth was the scientific orientation which emerged during the period 1777-1803, continuing through the 19th century. There were successive waves of scientific activity: first, the impact of the Geoffroys and the Rouelles and their students (A. Baumé, L.C. Cadet, Bayen, A.L. Brongniart, J.F. Demachy and others) who provided the initial impetus for a second wave at the end of the 18th century, generated by such pharmacists as Vauquelin, Deyeux, Parmentier, Bouillon-Lagrange and Bernard Pelletier. The first group belonged in the mainstream of pharmaceutical, mineralogical and analytical chemistry which had long been cultivated on the Continent; and it was this tradition which Lavoisier would merge with the pneumatic chemistry of the British, while the second wave was absorbed in the great crest of the chemical revolution.

But the scientific roots of French pharmacy cannot be dissociated from its institutional, social, political and economic framework. To understand the scientific component of 18th and 19th-century French pharmacy, it is also necessary to have a basic knowledge of its professional structure. The Berman collection contains information on the fate of the Collège de Pharmacie until its dissolution in 1796. The activities of its successor, the Société Libre des Pharmaciens, are traced up to the eve of the momentous legislation during the last year of the Consulate (1803) which created a new legal and institutional milieu for pharmacy. In this context, facets of professional activity are explored -- training, pharmacy practice in officines, (retail establishments) and civilian hospitals, public health functions, military pharmacy, economic and sociological components, and the effect of political and social change on the evolution of the profession during the turbulent years of the Revolution, the Directory and the Consulate.

#### 2. A PROFESSIONAL PROFILE

The legislation of 1803 (Loi de Germinal An XI) marked the end of one era and the beginning of a new one for the French pharmacist. When the Société Libre des

Pharmaciens was dissolved, its regulatory and educational functions were pre-empted by the State, and six schools of pharmacy were authorized by the new law. It became apparent very soon after the legislation of 1803 that, along with unmistakable advantages, the new order had brought with it many serious problems. The protectionist character of the ancienne compagnie of apothecaries before the Revolution had disappeared forever. Nor did the French pharmacist have the privileged economic position of his colleagues in Germany, where pharmacies were restricted to a population ration and where prices of medications were fixed by the State. The resulting proliferation of officines was seriously aggravated by an unfortunate feature of the 1803 law, namely, the creation of Jurys Médicaux in the provinces, which permitted second-class pharmacists with sub-standard qualifications to be turned out in excessively large numbers. Adding to the precarious economic position of many owners of officines was the government's failure to enforce adequately the provisions of the 1803 legislation which forbade the sale of secret remedies and prohibited the preparation and distribution of medications by unauthorized individuals. In the meantime, the professional position of the pharmacist was undermined by the growth of prefabricated proprietary medications which increasingly reduced his manipulative activity (compounding, assay, laboratory work) and adversely affected the practical training of pharmacy students in the 19th-century officine. All these trials and tribulations are reflected in a long series of mémoires, démarches, petitions, reports and articles by representative commissions of pharmacists and their leaders such as Charles L. Cadet de Gassicourt, Cap, Chevallier and many others.

While these circumstances tended to weaken the profession, there were nevertheless counterforces favorable to French pharmacy. The École de Pharmacie in Paris, founded in 1803 and directed by Vauquelin, quickly established a reputation for professional and scientific preeminence. The Société de Pharmacie, also founded that same year, strove to continue the scientific traditions of the 18th century, while a vigorous corps of civilian and military pharmacists significantly bolstered the profession. Leaders in 19th-century French pharmacy who were concerned with defining its scope and content and of clearly delineating the characteristics of the "true" pharmacist envisioned the pharmacist as more than an expert on drugs. One authority, J.J. Virey (1775-1846), felt that the "true" pharmacist should also be able to cope with problems of food adulteration, toxicology and disinfection, be competent enough in analytical chemistry to detect adulterated wine, unsanitary water, "mephitic" air, harmful food, determine whether certain plants had nutritional or medicinal value, and analyze mineral deposits for their constituents. Another eminent pharmacist, A.L. Fée (1789-1874), stated emphatically that society expected the pharmacist to be more than a man with a knowledge of drugs, namely, to be a guardian of public health, a consultant to governmental agencies in detecting adulterated foods, able to disinfect unsanitary places, provide chemical expertise in cases of criminal poisoning, and give advice on public health to clients. Although few pharmacists measured up in every respect to these extraordinary standards, there were many who were indeed competent in one or more of the fields mentioned by Virey or Fée, and they account for the amazing versatility and richness of French pharmacy.

### 3. THE FRENCH PHARMACIST AS SCIENTIST

The many-faceted problem of the interaction of French pharmacy with science during the nineteenth century is as intriguing as it is complex. One aspect of this problem which is of immediate concern to historians of pharmacy is the influence of the physical and biological sciences on the development of the pharmaceutical sciences (pharmaceutical technology, pharmaceutical chemistry and pharmacognosy). But there is also another dimension to this problem which should be of considerable interest to historians of science in general -- the contributions of nineteenth-century French pharmacy to science, which transcended the confines of the profession. In this sense science was cultivated by many nineteenth-century French pharmacists, for its own sake, and wherever its applications might lead.

"The main scientific achievement of French pharmacy during the 19th century was the application of chemistry to a variety of fields such as biology, hygiene, therapeutics and toxicology. The cumulative practical results were impressive -- new therapeutic agents were uncovered, new elements brought to light and characterized, and various significant techniques and apparatus were introduced.

"It is not surprising that chemistry continued to be assiduously cultivated by the pharmacists of Paris in the nineteenth century. This was simply carrying on a tradition established by master apothecaries in the preceding two centuries.

"We can best appreciate the full significance of the scientific anomaly in French pharmacy of the nineteenth century when we view its major scientific achievements as by-products or offshoots of its total professional activities." (A. Berman: "The Problem of Science in 19th-Century French Pharmaceutical Historiography," in Actes du dixième Congrès international d'histoire des sciences, Paris: Hermann, 1964, 2 vols.; vol. II, pp. 891-894.)

#### 4. INTERRELATIONS WITH MEDICINE

Mutual respect between the professions of pharmacy and medicine was generally observed during the 19th century; the sarcasms of Guy Patin directed against the 17th-century apothecaries as "manipulateurs ignorants" were now forgotten, and except for an acrimonious debate on military pharmacy which erupted in the Academy of Medicine in 1873, relations between the two professions were cordial. Fifty-five pharmacists were admitted to the Academy of Medicine between 1800 and 1873. More significant, however, were interrelations which were established in such fields as medical biochemistry, hygiene, toxicology and therapeutics. "Preoccupation with hygiene, which was such a prominent feature of the Paris clinical school, was also evident among pharmacists, who made important contributions in the field of public hygiene and the work of the Conseil de Salubrité. Noteworthy also was the application of chemistry to the problems of toxicology. Finally, the therapeutic resources of the physician were enriched through the discovery by pharmacists of new potent medications, which were codified during the first half of the 19th century by Magendie in his famous Formulaire."

(A. Berman: "Conflict and Anomaly in the Scientific Orientation of French Pharmacy: 1800-1873", Bull. Hist. Med., 1963, 37: 450-451).

## 5. PUBLIC HEALTH AND HYGIENE

Beginning with Cadet de Vaux, (1743-1828), who was one of the earliest to initiate the tradition of public health in French pharmacy, a high point was reached in the 19th century with the work of J.B.A. Chevallier (1793-1879) and A. Bouchardat (1806-1886). Before the Revolution, Cadet de Vaux had occupied himself with sanitary reforms in prisons, the disinfection of cesspools and wells, industrial hygiene and the removal of cemeteries from the center of Paris, notably the Cimetière des Innocents. The subsequent work by French pharmacists, especially in the fields of disinfection, industrial toxicology and food adulteration must be regarded as an important component of 19th-century French hygiene and public health. The most active among them were also members of the Conseil de Salubrité of Paris: J.A.A. Parmentier (1737-1813); N. Deyeux (1745-1837); C.L. Cadet de Gassicourt (1769-1821); Joseph Pelletier (1788-1842); H.F. Gaultier de Claubry (1792-1878); A.G. Labarraque (1777-1850); E.J.B. Bouillon-Lagrange (1764-1844); A.F. Boutron-Charlard (1796-1879); E. Soubeiran (1797-1858); Félix Boudet (1806-1878); A.A.B. Bussy (1794-1882); L.R. Le Canu (1800-1871); A.B. Poggiale (1808-1879); J.B.A. Chevallier (1793-1879); J.F. Persoz (1805-1868); A. Bouchardat (1806-1886) and A. Cahtin (1813-1901). A parallel development in hygiene was established in military pharmacy, first pioneered by Pierre Bayen (1725-1798) and Parmentier, then followed by a long succession of distinguished military pharmacists culminating with the work of F.Z. Roussin (1827-1894).

### Supporting Publications

The Lloyd Library possesses primary and secondary works on French Pharmacy, including the Bulletin and Revue d'histoire de la pharmacie.

### Example of Scope of Materials

1. Two entries of pharmacist-scientists in the Dictionary of Scientific Biography.
2. "The Scientific Tradition in French Hospital Pharmacy, " Am. J. of Hospital Pharm., 18:110-19, 1961.
3. "Conflict and Anomaly in the Scientific Orientation of French Pharmacy: 1800-1873," Bull. Hist. Med., 37:440-62, 1963.
4. "The Problem of Science in Nineteenth-Century French pharmaceutical historiography," Actes of the 10th International Congress of the History of Science, Paris, 2:891-894.
5. "Romantic Hygeia: J.J. Virey (1775-1846), Pharmacist and Philosopher of Nature,"

- Bull. Hist. Med., 39:134-42, 1965.
6. "The Cadet Circle: Representatives of an Era in French Pharmacy," Bull. Hist. Med., 40:101-111, 1966.
  7. "French Pharmaceutical Historiography" in Alex Berman, ed., Pharmaceutical Historiography (American Institute of the History of Pharmacy: Madison, Wisconsin, 1967) pp. 39-46.
  8. "The Pharmaceutical Component of Nineteenth-Century French Public Health and Hygiene," Pharmacy in History, 11:5-10, 1969.
  9. "The Persistence of Theriae in France," Pharmacy in History, 12:5-12, 1970.
  10. "Drug Control in Nineteenth-Century France: Antecedents and Directions," in Safeguarding the Public, Historical Aspects of Medicinal Drug Control, J.B. Blake, ed. (The Johns Hopkins Press, Baltimore, 1970) pp. 3-14.
  11. "J.B.A. Chevallier, Pharmacist-Chemist: A Major Figure in Nineteenth-Century French Public Health," Bull. Hist. Med. 52:200-213, 1978.
  12. "An Unpublished Letter from Eugène Soubeiran to Antoine Portal, June 3, 1828," Pharmacy in History, 24:32-37, 1982.