

ORIGIN OF SOME PHARMACEUTICAL ASSOCIATIONS.*

BY WILHELM BODEMANN.

Volumes have been written about the Origin of Species with the net result "All Theory."

I have some reminiscences about the origin of a few associations which I would like to store away in the archives of the A. Ph. A.—before my pen rusts and rests—and the facts I offer are bona fide, actual facts, and it will not take volumes to do so.

CHICAGO RETAIL DRUGGISTS' ASSOCIATION.

The C. R. D. A. was born on an Illinois Central Hyde Park train. We had in Chicago besides the \$25.00 U. S. Liquor License a \$25.00 City Permit for the privilege of selling liquor for medicinal purposes. This permit was about to be raised to \$100.00. This double license was obnoxious and induced some druggists to sell liquor by the drink in order to come out even with the heavy license. One day, in April 1885, I met G. P. Engelhard on the Illinois Central train, when we talked about the liquor permits and decided to call a mass meeting. George Engelhard got up "the call to arms," I signed it and added T. N. Jamieson's and two other names to the call without asking their permission, but knew that in the post-mortem I would have their consent. The mass meeting was a success and we organized, under the clever boss Engineer Jamieson's guidance, into ward clubs; each ward committee had charge of his alderman and the result was that our liquor permit was reduced to \$1.00 and druggists solemnly pledged to abstain from "Bar Practices." Out of this campaign was born the rejuvenated resurrected Chicago Retail Druggists' Association, now the largest, most influential, local organization in the United States.

THE NATIONAL ASSOCIATION OF RETAIL DRUGGISTS.

In the spring of 1898 T. V. Wooten, president of the C. R. D. A., issued a call for a National Retail Druggists' Association Convention by delegates from state and associations. G. P. Engelhard furnished the printer's ink and his expenses for this work are yet an open account. Leonard Tilletson furnished the brain—he was the man behind the scenes. Wooten called a meeting of the Chicago Druggists to appoint delegates to the St. Louis convention; he met with apathy and was about to throw up the sponge. At this critical moment Engelhard and Tilletson got me into a corner and urged me to make a bold bluff. I asked Wooten how many delegates he would require in order to make him stick. He said six, I pledged twelve and delivered that number. Thomas Nevin Jamieson paid the freight by furnishing the railroad transportation; Wooten stuck and the St. Louis Convention was pulled off. At that convention I happened to be chairman of the Committee on Organization. Such an avalanche of plans was offered that again the launching of the association was in doubt. As chairman of Committee on Organization, I ruled that the Chicago Association had called the meeting, and the Chicago plan, drawn up largely by that masterhand of "Quiet Bargaining," Leonard Tilletson, had to be discussed first. The convention got restless and called for a report from my committee, when we had not even begun to discuss

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the 101 various offered plans, chief among which were the Nebraska and Baltimore plans. As soon as the Chicago plan was discussed I adjourned the committee and went before the convention with my report, and the N. A. R. D. was the result. Two or three years later there was a general upheaval; that ugly word, secession, was openly uttered by several states, and in open session of convention I made the motion to refer these grievances to a special committee. The chairman asked what kind of a committee I had in mind, and in a jocular vein I said, "Refer it to the Committee on Raising Hell." I was made chairman, we adjourned the convention with the whole bunch of rebels to a large restaurant with amber liquid privileges. I appointed John Straw official collector and Charles Huhn Sergeant at Arms. John collected a quarter for the jackpot twice, we stuck our feet under the social board, had sandwiches with liquid refreshments, and, when we adjourned we were reasonably full of amber liquid and brimful of harmony; the N. A. R. D. heard no more of rebellion and secession and is to-day the largest, most influential retail druggists' association in the world.

I have prepared a report of the origin of the C. V. D. A. for the Chicago Drug Club, which I take the liberty to attach, to round this reminiscence for your archives. (File Historical Section, A. Ph. A.)

I offer these reminiscences, at this time, when eye witnesses to the scenes narrated are still living, so my facts can be verified, corrected or challenged.

ILLINOIS ANTINARCOTIC LAW.

My friend, Kantrowitz, submitted my paper on C. V. D. A. to the Historical Section last year, and, as I am credibly informed, was penalized for this friendly turn by being elected Secretary of this Section. I herewith respond to his request for a brief paper, and trust that he will again be penalized if not promoted, for he is the best stirring rod in public affairs that I ever knew in any human laboratory.

I am going to file my recollections of how the first narcotic law in Illinois originated, and let this Section settle the question as to whether Illinois had the first narcotic law or not. Until successfully challenged, we, of Illinois, claim priority in narcotic legislation.

Before 1900 Illinois had a cocaine law. The then States Attorney for Chicago, C. S. Deneen, had been appealed to by relatives of dope fiends to turn on the law screw to save their kin from perdition. I happened to have charge of Board of Pharmacy prosecutions at that time. Mr. Deneen called me into his office and submitted those heart-rending pitiful appeals, and asked me to turn on the law screw. I informed him, as he did not seem to know, that prosecution of the then cocaine law was up to his office and not to the Board of Pharmacy. Mr. Deneen assured me that his office had no funds to procure the evidence. I stated that the Board of Pharmacy had no surplus funds either, but I agreed to furnish the evidence if he would agree to prosecute. I soon had evidence against thirty-six Chicago druggists, but being after results and not after prosecutions *per se* I sent those thirty-six violators registered letters, stating that I had evidence against them of the cocaine law violations, and, on repetition of the violations would prosecute, which I did, but, being familiar with pharmacy law prosecutions only, I had brought suit against the stores, and not as the cocaine law specified against the individual who made the sale, and the cases had to be "nolle prossed."

Walter H. Gale was president of the Illinois Pharmaceutical Association from 1900 to 1902, and in his two annual addresses he urgently recommended the enactment of a narcotic law under the jurisdiction of the Board of Pharmacy. This was adopted by the Association, and a committee appointed consisting of G. P. Engelhard, John Straw, Walter Gale and W. Bodemann.

The then Assistant States Attorney, Howard Sprogle, who had charge of Grand Jury work, a personal friend of mine, was called into coöperation. He cheerfully assisted us in drafting the act, and in 1903 Illinois passed, as I believe, the first narcotic law and the forerunner of the Federal so-called Harrison Bill, which worked most successfully, at least, to the end that I succeeded in driving the infamous Arch Sinners (whose names I withhold) out of business and out of town.

I am not going into the arguments we used, as you are familiar with the necessity of such legislation, but we put it up squarely to the legislature, showing the result of this nefarious traffic—murdering not only the bodies but the souls of the victims. At the start we had hard work to get our craft into ardent support of narcotic legislation, but, to their credit, the fact remains that the druggists of Illinois, and of the United States, were the instigators and originators of this most humane legislation. And now I again make the motion for adjudication. Did Illinois pass the first narcotic law or, if Illinois did not, which State did?

PURE FOOD AND DRUGS ACT.

While unloading my reminiscences about the origin of laws and organization I hope that I will not be misunderstood and put down as anxious to blow my own bugle. It just happened that I had a hand in a few of these origins (and I don't like to talk through the hat) and jot down facts as they happened.

In 1898 the first Pure Food Congress convened in Washington, made up of delegates from States, Government, Associations, Schools and Boards of Pharmacy. Ebert, Greene, F. M. Schmidt, Louis Lehman, J. N. Jamieson and the writer went down from Illinois. While in the lobby of the National Hotel a gentleman addressed me thus: "You are W. Bodemann; I am J. H. Beal; I believe that you can do Pharmacy some good by seeing that the U. S. P. and N. F. are recognized as standards." I believe that's the way my friendship of twenty years with J. H. Beal began. I told my delegation about this. Jamieson, the prince of organization and political manipulation, at once saw the point, and we hunted up the Congressman who had charge of this legislative measure; we called at his home, explained the matter to him, and the thing was fixed.

Ebert, the great dissenter and lover of spouting in conventions, remained at the convention and preached to deaf ears, but he enjoyed it. Jamieson, however, was after results and got them; when Ebert found that we had fixed the job on the quiet, he got raving mad, packed his grip, didn't say good-bye, and left for Chicago. But our friend Congressman saw the point, and the U. S. P. and N. F. were recognized in the Bill which is now called the Pure Food Act.

Our Illinois Jim Mann, when the bill was before Congress, had a regular research laboratory in the committee room, and I remember specimens of bottles labeled "honey" that contained about 90 percent glucose, but every bottle had a dead bee to make believe that the bees had done it. Jim Mann and Harvey Wiley called this crooked honey plain fraud; to-day it would be called camouflage.

PHARMACY IN THE FRENCH ARMY.

During the war the writer (M.D., L.P.S.I., in *Chemist and Druggist*, June 7, 1919) has served in close touch with the French Army, in France, Italy, and Russia, and has thus been able to make a study of its Medical Service. He has been impressed by the fact that one of the most striking differences between the French Medical Service and the British is the high position accorded to pharmacy. Whereas in the British Army the dispensing of medicines is performed by sergeants, corporals, and even privates—who may or may not possess pharmaceutical diplomas—and the charge of advanced and base depots of medical stores is entrusted to quartermasters, in the French Service these duties are in the hands of a special body of qualified pharmaceutical chemists who hold the same rank as medical officers. In addition to dispensing medicines and to being entrusted with the care and disposal of all stocks of drugs, dressings, and appliances, other important functions are performed by French pharmacist officers, *viz.*:

1. They act as analytical chemists and have charge of all laboratories, including those established in each division for the analysis of water, foods, etc.
2. They act as divisional gas defence officers, and have charge of all reserve supplies of *masques* and other defences against gas.
3. They have charge of all supplies of disinfectants, a duty which in the British Army is in the hands of the Royal Army Service Corps.
4. They act as staff officers and technical advisers to Directors of Medical Services of French armies.

In order to see how the pharmacist officer fits into the French military machine, a brief sketch of the organization of the French Medical Service, or *Service de Santé*, will be necessary.

THE SERVICE DE SANTÉ.

It consists of:

(A) Officers: (i) *Médecins* (Medical Officers); (ii) *Pharmaciens* (Pharmacists); (iii) *Officiers d'Administration* (Medical Quartermasters).

(B) Personnel: (i) *Infirmiers*; (ii) *Brancardiers*, who are the rank and file of the Medical Service.

The grades of *personnel* are:

Sous Aides Majors, *Médecins Auxiliaires* (Medical Students), *Pharmaciens Auxiliaires* (Pharmaceutical Students), and *Dentistes Militaires*.

Sous Officiers, *Adjudants-Chefs*, *Adjudants*, *Sergents* and *Caporaux* (as in the French infantry).

The grades in the French Medical Service are:

Médecin Inspecteur-Général, ranking as Major-General; *Médecin Inspecteur*, ranking as Major-General.

Médecin Principal de 1re Classe, ranking as Colonel; *Médecin Principal de 2me Classe*, ranking as Lieutenant-Colonel.

Médecin Major de 1re Classe, ranking as Major; *Médecin Major de 2me Classe*, ranking as Captain; *Médecin Aide Major de 1re Classe*, ranking as Lieutenant; *Médecin Aide Major de 2me Classe*, ranking as Second Lieutenant.

Pharmacien Inspecteur, ranking as Major-General; *Pharmacien Principal de 1re Classe*, ranking as Colonel; *Pharmacien Principal de 2me Classe*, ranking as Lieutenant-Colonel.

Pharmacien Major de 1re Classe, ranking as Major; *Pharmacien Major de 2me Classe*, ranking as Captain; *Pharmacien Aide-Major de 1re Classe*, ranking as Lieutenant; *Pharmacien Aide-Major de 2me Classe*, ranking as Second Lieutenant.

Officiers d'Administration are graded as first, second, and third class, and rank as Captain, Lieutenant, and Second Lieutenant. A few reach the grade of *Officier d'Administration Principal*, with the rank of Major.

In regard to the rank of Major-General mentioned above, it should be noted that in the British Army there are four grades of Generals: General, Lieutenant-General, Major-General, and Brigadier-General. The French have only two grades, *viz.*: *Général de Division*, corresponding to our Major-General, and *Général de Brigade*, corresponding to our Brigadier.

I have described the *Officiers d'Administration* as Medical Quartermasters, but they are much more. They correspond more closely to the Captains of Orderlies in the early days of the British Medical Service, as they carry out most of the executive work of a French military hospital.

The French medical and pharmacist officers control and organize the professional work of the hospital, but the purely military duties of command and non-technical administration are in the hands of this special body of purely administrative *non-medical* officers. The exclusion of French Army surgeons and pharmacists from the exercise of purely military functions results in a military inferiority to officers of the same rank in the combatant Services. A French friend put the position very concisely, as follows: "*Un médecin major ou un pharmacien major de deuxième classe n'est pas un capitaine. Un médecin ou pharmacien major de première classe n'est pas un commandant; il est un peu moins. L'officier combattant a toujours, avec égalité de galons, la préseance sur l'officier des services (Santé, Intendance, Vétérinaire, etc.)*."

The *Médecins* and *Pharmaciens Auxiliaires* have the rank of *Adjudant*, which corresponds roughly to our Warrant-Officer grade. They are junior medical and pharmaceutical students. The *Médecins Auxiliaires* are chiefly employed as regimental medical officers, but the *Pharmaciens Auxiliaires* are employed in a great variety of ways.

We have nothing at all resembling the "*Médecin Auxiliaire*" or "*Pharmacien Auxiliaire*" in the British Medical Service, as the "Apothecaries," or as they are now styled, "Assistant Surgeons," employed with the Army in India are Europeans or Eurasians who have been through a complete medical curriculum in a Government Medical College and have been granted diplomas as general medical practitioners in British India. They act as dispensers in military hospitals in India, but this is a minor part of their duties.

The field uniform of the French Medical Service is the same as that of other officers. The *Médecins* wear a gorget patch of cherry-colored velvet and the *Pharmaciens* a similar patch of green velvet. Both wear the snake of Aesculapius (*le caducée*) enclosed in an oval laurel wreath embroidered in gold on the velvet. "*Médecins Auxiliaires*" and "*Pharmaciens Auxiliaires*" wear the same gorget patch as their officers.

The "*Officiers d'Administration*" wear a ten-pointed golden star on a red velvet gorget patch.

Military dentists, as will be seen later, are not officers. They wear the uniform of *Adjutants* in the *Service de Santé*, with the snake and laurel-leaf accompanied by the letter "D" embroidered in silver on the collar. The badges of rank of both *Médecins* and *Pharmaciens* are of gold both on the sleeve and *képi*. Dentists wear no gold braid on their caps.

The rank and file of the French Medical Service is divided into two well-defined classes, *Infirmiers* or hospital orderlies and *Brancardiers* or stretcher-bearers. They are all elderly men drafted from infantry battalions. They continue to wear their regimental numbers—there are no regimental badges in the French Army—with the exception of specially trained men who always function as male nurses, assistants in the pharmacies, and laboratory attendants. These men are distinguished by wearing on their collar the snake and rod of Aesculapius in a laurel-wreath embroidered in white cotton on a dull red background.

The French Medical Service in the field is divided into two zones: 1. *Service de Santé de l'avant*. 2. *Service de Santé de l'arrière*.

SERVICE DE SANTÉ DE L'AVANT.

The direction of the Medical Service with the Field Army does not differ materially from the British except that which corresponds to the Director of Medical Services of an army has a *Pharmacien Principal* (ranking as a Colonel) serving on his staff. This pharmacist officer performs all the functions of a medical staff officer, such as carrying out inspections on behalf of his chief. So actively is he employed in this direction that the *Pharmacien Principal* of the particular French Army to which the writer belonged, during the second battle of the Marne, was actually captured by the Germans while proceeding with instructions to a hospital of evacuation during that very rapid retreat. *Pharmaciens* do not serve on the staff of lower formations than armies, but they play an important part in the *personnel* of the medical units which collect the wounded on the battlefield and in the field hospitals.

To understand their employment it is necessary to sketch the medical organizations of a French division as the division is the fighting formation in direct contact with the enemy. With a British division there are three field ambulances and a doctor with each battalion, but the organization in the French Army is more complicated, as there are the following formations:

- (1) The Regimental Medical Service.
- (2) The G. B. D., or *Groupe des Brancardiers Divisionaires*—i. e., Divisional Bearer Company.
- (3) The S. S. A., or *Section Sanitaire Automobile*—i. e., the Divisional Motor Ambulance Convoy.
- (4) Ambulances or Field Hospitals (usually two).

In regard to the Regimental Medical Service, the first thing which the student of the organization of Continental military systems has to understand is that a "Regiment" corresponds to what we call a "Brigade" in the British Service. Prior to the introduction of the Territorial system in our Army, what are now known as "Battalions" were distinguished by numbers and styled "Regiments." Now, of course, the regiment embraces at least two Regular battalions, sometimes one or two special reserve battalions, several Territorial battalions, and an unlimited number of "Service" battalions. In our Army, four battalions, usually from four

different regiments, are grouped together during the war as a brigade. Each infantry regiment in the French Army has three battalions, which never change in peace or war. In medical charge of the regiment is the *Médecin Chef du Régiment*, who has, as his staff officer, a *Pharmacien du Régiment*. Each battalion has a medical officer and a medical subordinate—*i. e.*, a *Médecin Auxiliaire* or junior medical student. These battalion medical officers serve under the orders of the *Médecin Chef du Régiment* and not directly under the A. D. M. S. of the division as in our Army. They organize battalion aid-posts, exactly similar to the formation wrongly called regimental aid-posts in our Army, but from these they send their wounded and sick, not to a field ambulance advanced dressing-station as in the British organization, but to a real regimental aid-post (*Poste de Secours régimentaire*), where they are dealt with by the *Médecin du Régiment* aided by the regimental pharmaceutical officer. Like the regimental *Médecin Chef* the *Pharmacien du Régiment* is on the staff of the *Colonel Commandant*, and is part and parcel of the regiment. He can only be changed by supreme Army authority.

The *Médecin Divisionnaire*, who corresponds to our Assistant Director of Medical Services, exercises technical supervision, but has no military command over the regimental pharmacist officers of his division. It will be seen that the French regiment is a complete medical and pharmaceutical organization in itself.

The next fighting formation in which the pharmacist officer is found is the *Groupe des Brancardiers Divisionnaire*, or divisional bearer company. A "Groupe" consists of the following *personnel*:

One *Médecin Chef*, who is a *Médecin Major*.

Two *Médecins Aide-Majors*.

One *Pharmacien*.

One *Officier d'Administration*.

One *Médecin Auxiliaire*.

Three *Pharmaciens Auxiliaires*, and

108 Bearers.

It will be seen that the unit has as many pharmacists as it has doctors. The "Groupe" is universally spoken of as the "G. B. D." The French are as fond of alphabetical titles for military formations as we are:

The system of working this unit is as follows:

I. *Poste de Secours*.—Detachments are, during battle, attached to the Battalion Aid Posts (*Postes de Secours de Bataillon*).

II. *Relais de G. B. D.*—Within reasonable distance of the Aid Posts are Relay Posts of Bearers.

III. *Poste de Recueil*.—This corresponds roughly with our advanced dressing-station, and is the point at which motor- and horsed-ambulance vehicles and wheeled stretchers are kept.

IV. *Post Centrale G. B. D.*—This is the Headquarters of the G. B. D., and has the following:

1. *Magasin de Matériel Anti-gaz*.

2. *Laboratoire de Toxicologie*.

3. *Dépôt de Désinfectants*.

These three formations are entirely in the hands of the pharmacists, who may in addition be stationed at any of the three previous points.

The next field medical unit with which the pharmacist is found is the *Ambulance*, and in the French Army this term is employed to describe a field hospital, not a mixture of bearer company and field ambulance as in the British Army.

The *personnel* of an ambulance consists of eight officers (five *Médecins*, one *Pharmacien*, two *Officiers d'Administration*) and thirty-two other ranks.

The strength of the rank and file roughly corresponds to one and a half "tent sub-divisions" of a British field ambulance. The number of ambulances attached to a division varies according to its needs. There are usually two. One is the *Ambulance de Triage*, which receives all wounded and sick. It distributes cases to various centers, and keeps patients not fit to travel and slightly wounded who will quickly recover. Except for the fact that it is a hospital and keeps cases, it corresponds to our divisional dressing station. The other ambulance is a small hospital, and takes sick, slightly wounded, and slight skin cases. There is accommodation for one hundred and fifty patients, and the period of their stay is usually limited to three weeks. It is obvious that, in both these varieties of field hospital, there is plenty of scope for the pharmacist, and one of the most important features of these formations is the pharmacy, which is invariably well equipped and stocked. In addition to these ambulances, each French division organizes what are called *Infirmeries*, which have no analogue in the British Service. They provide for the treatment of very slight cases quite close to the firing-line. The patients are not shown as admissions to any medical formation. The establishment is the *Médecin Chef* of a regiment in reserve with his *Pharmacien du Régiment* and battalion medical establishments.

Here, again, the presence of a trained pharmaceutical officer makes itself felt by a very high standard of pharmaceutical service to the sick and wounded under treatment.

Behind the zone of the armies are the *Etapés*, which correspond roughly to our lines of communications. The *Etapés* include various hospitals established for medical and surgical work and for the various specialties of medicine and surgery. Each has its *Pharmacien* and a complete pharmaceutical as well as a medical staff and organization.

SERVICE DE SANTÉ DE L'ARRIÈRE.

Behind the *Etapés* we find the hospitals of evacuation, ambulance trains, and railway rest-stations, which convey the wounded and sick to the medical organization of the "Interior." The home territory, or "Interior," is the portion of France well outside the zone of the armies. Here, hospitals for the continuous treatment of wounds and sickness are established on similar lines to our stationary and general hospitals. There are twenty *Régions* corresponding to the twenty Territorial Corps of the French Army. Each *Région* has a *Directeur de Service de Santé de la Région*, who has a *Pharmacien Principal* on his staff. Throughout each region the pharmacist officers, their pharmacies, laboratories and stores are a special branch of the Medical Service supervised by an administrative pharmaceutical officer, who is expert adviser to the Medical Director.

DENTISTRY IN THE FRENCH ARMY.

An article dealing with the pharmaceutical profession would not be complete without some further reference to the sister profession of dentistry. In marked

contrast to the high position accorded to pharmacy is the comparatively low one held by dentists in the French Army. The pharmacist is the equal of his medical brother-in-arms in all respects, but the dentist is not an officer at all, but a *Sous-officier* like the *Médecins* and *Pharmaciens Auxiliaires*. The dentists have low rank in the French Army, but there are plenty of them. In the British Army dentists are few and far between. There is only one to each casualty clearing station, and only one or two with the stationary and general hospitals. In the French Army each division has three, each corps has an additional one, and there is a liberal supply to the hospitals on the lines of communication and at the base.

In the foregoing sketch the high position held by the pharmaceutical profession in the French Service has been established. Pharmacy has been described as the handmaiden of medicine. In the British Army she is little more than a drudge, but in the Army of the great French Republic she is accepted as a sister, enjoying equal rights and privileges.

QUANTITATIVE ESTIMATION OF MENTHOL IN ALCOHOLIC SOLUTION.*

BY JOSEPH L. MAYER.

Having occasion recently to make many quantitative determinations of menthol in alcoholic solution, and there being no method available, I adopted and have very successfully employed the following:

Into an accurately weighed Petri dish (a large watch glass will serve equally well) accurately measure 5 Cc. of the sample, then place in a desiccator over sulphuric acid and allow to remain over one night, after which weigh. The increase in weight is due to the menthol, the purity of which can easily be proved by making a melting point determination and other physical and chemical tests which may be needed.

A trial solution made to contain 14.6950 grammes of menthol with alcohol sufficient to make 50 Cc. when analyzed by the above method showed the presence of 14.460 grammes per 50 Cc., a shortage of 1.59% which is practically negligible in work of this kind, where the authorities who collect the samples are disposed to allow a variation of at least five percent and in some cases even more.

The method is so accurate, simple and easily applied that it should commend itself to pharmacists and others who have need to use it.

RESEARCH AND ANALYTICAL LABORATORIES
OF THE
LOUIS K. LIGGETT COMPANY.

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