

### Post War Changes in Canada

The modern era is generally dated from the end of the First World War. Following the Great War there were few major wars or international events that had an impact on Canada. The Treaty of Versailles and the subsequent discussions of the victors in Paris reconfigured the map, especially of Europe. As a result of the war there was a massive shift in population as refugees lost their homes and countries. Some of them came to Canada.

Following the war the returning soldiers and refugees brought with them the influenza epidemic of 1918-19. This was a very infectious and virulent strain which infected the troops on the Western Front in the fall of 1918 and came home with them. Many returning soldiers who had survived the war died of the so called Spanish Flu. Over half a million people died in the U.S. and perhaps 50,000 in Canada. The total number of world deaths has been estimated at 25 million. The influenza epidemic killed more people than in the Great War.

The 1920's were generally a period of growth and prosperity. Initially there was a depression after the war and the various economic sectors had challenges resulting in both growth and stagnation. There was a serious shortage of many products as the war had shifted the economy to war supplies rather than consumer and business products. Once things became more normal there was a building boom with many large stone and brick buildings that now are part of our heritage in Canadian cities. They reflected the architectural design of the time and many remain as monuments to the era. In the 1910s and 1920s era Regina was building 10 story skyscrapers. Downtown was the hub of the community with the major banks, retail stores (Eaton's, Simpson's, and the Hudson's Bay Company) and major firms, and the site of many social activities. This pattern of life was much like prewar activities with Sunday reserved for the home and religious observance with few places to eat or drink, and libraries and theatres closed. The theatres were becoming much larger and more popular, telephones were coming into use, radio had finally appeared and everyone read the newspaper. For travel in cities there were street cars and between cities people used trains.

The era was also saw a major shift in retailing from small owner operated stores, many of which produced their own products, to a large scale corporate organizations that became very efficient at merchandising, marketing and retailing. The Retail Merchants Association were active in this period as they were very concerned about the growth of department stores as well as competition from pedlars and unlicensed stores. The newly developed department stores were particularly attractive for women as they were more anonymous due to a cash only policy and a wide variety of products all in one place. Eaton's in Winnipeg by 1925 was eight stories high with 21 acres of shopping space and 29 elevators. Prices on most items were less than the competitors. They were able to do this due to their size that enabled them to negotiate a better price for quantity but also advertising allowances, rebates, special premiums, placing discounts, and special arrangements. Chains also began in the early part of the century and grew quickly. It was this opposition that pharmacists fought for the next twenty years.

Small retailers claimed to want a higher standard of behavior and service for their customers by

restricting hours, Sunday closure, and higher retail licence fees. Their argument was that they were always in business through good times and bad, provided credit, hired well paid staff and took pride in their wares whereas backstreet operations were here today and gone tomorrow. The retail culture was strongly masculine and it was difficult for women to fit in. For example, Madame Charbonneau of Pharmacie Moderne was portrayed by her competitors as “formidable”. Women pharmacists insisted they were still women and not part of the male retail culture as shown by the statements of Anne Simpson of Innisfail, Saskatchewan when she became the first woman delegate to CPhA, “I dote on cooking and all other kinds of housework. I practice at every opportunity, even to washing dishes”. Conferences were organized for men and as late as 1974 the CPA Conference had a “wives program”, an anachronism that drew complaints. A prominent pharmacist, Henry Watters of Ottawa, was active in the Retail Merchants Association and in 1923 in a speech urged them to organize themselves to fight the mass merchandisers. He had been a leader in Pharmacy (Ontario College of Pharmacy), President of CPhA, the owner of the Standard Drug Company in downtown Ottawa, the mayor of Ottawa, and an officer in the Militia.

The other major change occurring in the marketplace was the shift from uniform generic manufactured goods distributed to retailers to sell, to products packaged to sell through the brand name advertising and direct sale to the retailer often bypassing the wholesaler. This shift of manufacturers into consumer selling had already taken place in patent medicine market and was about to take place in the prescription market with physicians as the customer. In order to compete, retail pharmacy had to become a corporate organization with efficient operations, customer service, product display, clean pharmacies, and well trained staff. This process began after the Great War and continued until 1970. Independent businesses also continued to provide credit to purchasers and this entailed long periods to collect the money and inevitably some bad debt. Credit to customers was a continuing source of frustration to pharmacies and only ended with the advent of credit cards. Fortunately, pharmacies were able to survive as post war prosperity increased the size of the market and the many pharmacies in small towns avoided the intense competition in urban centres.

Another approach to compete with chains was to form voluntary chains. The United Drug Company of Boston offered products under the Rexall label to select pharmacies in a region and the pharmacies would agree to purchase products from their wholesaler in which they were offered shares. This was a very attractive offer to pharmacists and the number of Rexall stores opened from 1909 to 1934 was almost one thousand. Drug Trading Wholesale (1909), owned by retail pharmacists, began a successful voluntary chain. A major shift was occurring in Pharmacy in which the pharmacists no longer produced products for sale to customers but was a retailer of prepackaged products made by a manufacturer. The path to success was business skill not compounding skill. To assist them in this a drug section of the Retail Merchants Association was formed. Over time this shifted to a retail price maintenance focus involving the Canadian Pharmaceutical Association. In 1923 there was a further attempt to have a greater impact on price maintenance by forming The Allied Drug Associations of Canada, which included the pharmaceutical manufacturers, drug wholesalers, and pharmacy. This organization was soon reorganized as the Proprietary Articles Trade Association (PATA).

The Proprietary Articles Trade Association (PATA) negotiated with manufacturers that they would sell only to pharmacies that sold their products (mostly patent medicines and toiletries) at a set price. If manufacturers sold to discount stores the pharmacies would shift to other firms for products. They were attempting to maintain a margin of 50% but with the economy sinking they gradually accepted a lower margin on products. This endeavor continued for over 20 years until the Combines branch of the federal government declared it illegal. The need to have pharmacists organize to make representation to the Federal government was reasonably successful and progress was made on having an influence of legislation such as the Proprietary and Patent Medicines Act and the Opium and Narcotic Drug Act.

An example of the use of price maintenance to attract and maintain pharmacist purchases is an advertisement that appeared in the Canadian Pharmaceutical Journal in 1921 for Wampo's Cod Liver Oil Extract. The advertisement reads, "Makes a satisfied customer because it gives results. It is also a satisfactory product to sell because it is price protected and shows a good margin of profit."

From the increased manufacturing stimulated by the war there was a shift in the Canadian economic structure from a reliance on agriculture to more manufacturing, both primary processing of resources and tertiary manufacturing. Manufacturing factories also led to accompanying urban growth. In a decade Montreal grew by 38%, Toronto 32%, Vancouver by 48%, Windsor by 56%, and Winnipeg by 24%, with Canada's population reaching 10 million in 1931. In a very short period Canada changed from a rural, agricultural country to an urban manufacturing country. There was also a major change in the role of women in society. The war had provided many women with paid employment and opportunities to volunteer. This changed the status of women from the Victorian protected woman to the more self sufficient woman in the work force. In 1901 only one in ten women was in the work force but by 1920 one in six was employed, although in a limited number of areas. This trend continued with the growth of white collar and retail employment. Increased prices also pushed more women and children into the work force in order to have enough money to live on.

One example of this rapid manufacturing growth was the increase in automobile production. Henry Ford's automated assembly line was brought to Canada under a licensing agreement with the Walkerville Wagon Works that began production in 1904 and by 1913 was producing more cars than any other plant in the British Empire. McLaughlin was purchased by General Motors in 1918 and produced the entire line of GM cars in Canada and throughout the Commonwealth. Chrysler purchased Maxwell-Chalmers in 1925 to enter the Canadian market and begin production. Several other automobile manufacturing plants were in existence but the big three accounted for three quarters of Canadian sales. This consolidation of the industry resulted in the industry being dominated by U.S. branch plants. The flood of automobiles led to the construction of roads suitable for cars over the next century. Initially, people thought that automobiles would never replace horses as the cost of building roads was prohibitive. In 1918 there were 275,000 automobiles registered in Canada and this rapidly increased to 1.9 million in 1929. Next to the United States, Canada was the most automobile using country and soon had traffic congestion in

major urban areas.

The experience with airplanes during the war was valuable in establishing planes as a means of transportation. It was particularly useful in the North as the use of float planes enabled most of the areas to be linked to the rest of Canada. It also led to their use in transporting mail.

With manufacturing came collective bargaining which was strongly resisted, not only by companies but also by government. Strike breakers brought in by the companies resulted in violence and the RCMP was ordered to take part in strike breaking in order to preserve order, an action that blemished their prestige in Canada. In 1919 there were a number of strikes including the General Strike in Winnipeg in which two union workers were killed and 30 injured by the RCMP. The exploitation of workers in Canada was unacceptable to the many British workers who had been part of a trade union in Britain. They agitated for better working conditions and the unions slowly grew in strength with a number of strikes and violence that continued for a long time. The public outcry over the Winnipeg Strike was the first major event that led government to begin a process of change in labour legislation. Collective agreements for unskilled workers began in the 1930's

Population growth shifted to the West and the population in the Prairie Provinces jumped from 3.2% of the population in 1891 to 22.2% in 1921. Ontario shrank from 43.7 to 33.4%. The differing rates of growth and income became a continuing feature of the Canadian economy and the issue of regional disparities continues to be divisive.

Another major change in this period was the shift in trade from Britain to the United States. By the mid 1920s the United States had become Canada's largest trading partner for exports and imports. In this same period newsprint production grew with the removal of import duties in 1911 to be larger than that of the U.S. With the settlement of the prairies, grain production became a major export to Britain and Europe increasing from \$14 million in 1900 to \$279 million in 1920. The ships taking grain to Europe returned with immigrants. Exports of manufactured goods began with rubber goods, automobiles, farm machinery, and leather goods. Investment also changed from massive British investment in Canada up to 1913 then declined while US investment in Canada increased to double that of Britain by 1929. The interdependence of Canadian and US trade was important in the two countries as they plunged into the stock market crash of 1929.

The war also led to the growth of government and social programs by the federal and provincial governments. Federal/provincial cost shared programs and federal government grants were initiated and the predominant position of the federal government declined relative to that of the provinces. In the 1920's the federal government transferred ownership of land and natural resources to the Prairie Provinces. An old age pension program was one of the first major social programs that emerged in 1927 but was subject to a means test and was only available to people aged 70 and over. Welfare programs continued to exist at the municipal level at extremely low levels. The health component of the welfare programs was very small and drugs were normally provided through the pharmacies of municipal hospitals (there were only municipal and religious hospitals – many hospitals continue to carry the original municipal names such as Saskatoon City Hospital, Ottawa Civic Hospital).

1927 was Canada's Jubilee and various celebrations were held. Radio was becoming popular and devoted mostly to music and news. For the Jubilee there was an abundance of Canadian composed music.

Athletic challenges abounded in this era. For example, in January 1927 the Wrigley Marathon was held with a prize of \$25,000. This was a swimming event from Santa Catalina Island to the mainland of California (about 37 km). Over a hundred participants took place but the winner and only person to complete the swim was George Young of Toronto. It took him 15 hours and 45 minutes. In the Olympics Percy Williams won a gold medal and was claimed to be "the fastest man in the world". During this period the Edmonton Grads women's basketball team, formed from students and graduates of an Edmonton high school, dominated world basketball from 1915 to 1940. They set a record of winning 502 games and only losing 20. They were recognized as world champions at international tournaments on four occasions.

### Alcohol legislation - Prohibition

In the early part of the century, Canada became quite dry as a result of prohibition in the provinces. The religious push by Protestants for temperance led to a demand for prohibition as a result of the increase in number of drinking places and violence by the working men, mostly single. This movement was supported by the newspapers which strongly condemned the social costs of drunkenness. The hotels were less a place to stay than they were a place to drink with standing space only. The purpose of customers was to get drunk rather than to socialize. There were a lot of bars in each city and a tremendous amount of drinking took place. This was not just in Canada. In the United States there were 4131 breweries in 1873. Prohibition legislation was initiated and ended at different times in each province. This stopped the selling of alcoholic beverages in bottles in each province. In addition there were local bans on the selling of alcohol in bars and hotels that preceded and continued after the provincial prohibition on alcohol sale.

### Prohibition Dates in Canada:

PEI – 1901-1948  
Manitoba – 1916-1923  
Nova Scotia – 1916-1930  
Alberta – 1916-1924  
Ontario – 1916-1927  
Saskatchewan – 1917 - 1925  
New Brunswick – 1917 - 1927  
British Columbia – 1917 -1921  
Newfoundland – 1917 -1925  
Yukon – 1918 -1921  
Quebec – 1919 -1921 (beer and wine were never banned)

The prohibition against selling liquor did not apply to the manufacture of liquor for export. As a

result the distilleries in one province sold the whisky to people in the next province. When prohibition was enacted in the U.S., whisky was exported there, usually by smuggling it over the border. For a period this provided a major flow of revenue to those who shipped booze to the United States.

Promotion of abstinence in the Maritime Provinces began in the early 1800's and various organizations, churches, and newspapers urged moderation or abstinence. The large number of bars in Halifax and the presence of sailors created excessive indulgence. National prohibition in the U.S. beginning in 1920 resulted in a large number of Canadian fishing boats entering into rum smuggling. This provided an alternative to the depressed job opportunities in the area. It was a profitable business which grew increasingly risky over time. It also generated many legends.

### Prohibition and Pharmacy

Prohibition cured the worst of the excesses of alcohol abuse and once this occurred many people no longer supported total prohibition but wanted more government controls in the form of government liquor stores. Over time the increase in bootlegging and smuggling with the support of a significant proportion of the public led to violence, corruption of officials, and fines or jail terms for those involved. The recognition of the need for some form of moderation in the legislation and the control of liquor in the provinces led to the demise of prohibition. Even though liquor then became available in liquor stores for sale at home the bars remained shut down for a further period. Saskatchewan prohibition shut down the sale of liquor but allowed physicians to prescribe whisky for "medicinal purposes". The Canadian Pharmaceutical Association conference in 1920 described the sale of liquor through pharmacies as being a major problem for the profession. However, most of the physicians and pharmacists opposed prohibition and were willing to supply their patients with a quart (40 oz) of whiskey with little regard to the health aspects. In 1917 there were 180,000 prescriptions for alcoholic beverages in Vancouver alone. Regulations continued to be enacted to regulate the flow of whisky through this channel so that prescriptions became restricted to 26 and 12 oz bottles instead of 40 oz bottles. Over time these quantities also shrunk. There were many patent medicine tonics at this time that contained alcohol and which were very popular both with prohibitionists and boozers. Rexall's Rheumatic Remedy had 9% alcohol and Hamlin's Wizard Oil contained 32.5%. Although the end of prohibition resulted in the sale of liquor through government stores, restrictions on public drinking places continued in some places for a long time (1961 in New Brunswick).

Between 1911 and 1925 Saskatchewan pharmacists had a problem in that booze was only available in pharmacies. The Association believed that this undermined the practice of pharmacy and lowered standards. As a result of their concerns they continuously lobbied government to find some other outlets for alcoholic beverages. Needless to say some pharmacists were quite happy to continue selling alcohol and gain the extra income.

Another link of prohibition and pharmacy was the move of the Bronfman brothers from mail order liquor sales to people in the next province to the establishing a wholesale pharmacy in Yorkton, Saskatchewan in 1919. The Canada Pure Drug Company became the vehicle that made

them immensely rich. The secret was to become a bonded warehouse and import excess whisky from Scotland and then export it from Canada, mostly to the U.S. There was also a loophole in prohibition legislation in that booze could be exported to other provinces for re-export and firms sprung up to do this. Mail order houses also sprung up to send whisky to customers in other provinces. It is estimated that soon after opening Canada Pure Drug over 30,000 cases of whisky had been moved through Yorkton. They also began to make whisky using alcohol in bond and over-proof whiskey which they then watered down. A lot of the whiskey was smuggled into the U.S. from Saskatchewan and many legends surrounding the “rum runners” exist. Dealing in cross border whisky was an extremely large volume, high profit enterprise and the largest company involved was the Canada Pure Drug wholesale. It was also the largest drug wholesale although they sold no drugs. The powerful cars used to transport booze across the border was usually the Canadian high quality McLaughlin automobile.

### **Advances in Medicine**

Building on the scientific work on infectious disease, public health, surgery, and understanding of disease process, medicine became more effective and the stature of physicians grew. Instead of death houses, hospitals became places where even the well to do went for surgery and childbirth. Donations to hospital construction resulted in many new hospitals and more medical schools. The Toronto General Hospital opened in 1913 and developed a reputation as one of the world’s finest facilities and one of the largest, best equipped, and best staffed medical schools in North America.

Of particular interest is the development and production of vaccines by Connaught Laboratories in Ontario. Their facilities were funded in large part by a grant from Col. Gooderham (Gooderham and Worts, distillers). The laboratories produced diphtheria and tetanus antitoxin, smallpox and anti-typhoid vaccine, serums for the treatment of meningitis, and the Pasteur treatment of rabies. These products were provided to the provinces to use in public health at no cost to the patient. This reflected a shift of public health from filth in streets, shops, and hospitals to control of patient-to-patient spread of disease. Isolation and medication to control epidemics became the norm.

The biological sciences were making remarkable progress at the end of the century. Studies of the endocrine hormones showed that the pancreas released insulin and that this was necessary to life. Several investigators investigated ways of extracting the insulin and testing with dogs. They were unsuccessful and despite these negative results Frederick Banting sought support from the University of Toronto to do research in the area. With the assistance of a graduate student, Charles Best, he was successful in extracting insulin from the excised pancreas of dogs and showing that it prevented diabetes in dogs with a ligated pancreatic duct. Based on these results the extract was used on a critically ill 14 year old boy in a terminal diabetic coma. He survived and with the success in further patients the worth of insulin was established. Due to production difficulties at the University of Toronto and the demonstrated interest of a pharmaceutical firm, a license was negotiated and commercial production by Eli Lilly Company began. Lilly was able to solve the production problem by using isoelectric precipitation on the pancreas extract. Fresh pancreas was needed for production and slaughterhouses all over North America were soon sending large quantities for making insulin. Purity and stability were major problems in the

production of insulin and these were eventually improved. The development of this product was the first time that extensive clinical trials were conducted before marketing a product (1923). It was to be the beginning of a new systematic, scientific approach to new drug development. This wonderful invention in Canada received worldwide acclaim. Banting and Best received the Nobel Prize for their work and Connaught Laboratories received substantial income from patent royalties that furthered their research into vaccines. In Canada, insulin was distributed through selected wholesale firms at a low mark up and pharmacies sold the product at a low cost. It was handled as a non-prescription drug and purchased by patients as they needed it from a pharmacy. This unique and co-operative system for a unique product reflected well on pharmacy.

*Any study of the insulin saga should also examine the person of Frederick Banting. He was not a gifted researcher. He pursued a course of action that many had followed and given up on. He received support based on personal connections rather than a convincing research proposal. He was a friend of the Group of Seven (which dominated Canadian art between the wars), was a sympathizer with Russian communism, was a divorced man in a religious society, and later headed a biological warfare organization in Alberta for the British Commonwealth during the Second World War.*

## Pharmacy Education

As Canada became more urban and information flowed more freely, people demanded more education for their children. Schools were built, universities were created, and technology advanced quickly. During the war airplanes advanced from primitive structures of sticks and wire to powerful, precision made pieces of machinery. Similarly cars became more powerful and reliable. Tractors began to replace horses on farms. Electricity was becoming widely used and understood. Chemistry and biology developed very quickly. It was in this context that pharmacy education began to become more scientific and professional. The profession, however, was still mired in the old way of operating and resisted change either through lack of initiative or an inability to understand the many new scientific discoveries. Many pharmacists saw themselves as merchants rather than health professionals. Writers to the Journal also claimed that there was an excessive number of pharmacists and pharmacies which stimulated competition, fair and foul, and made it more difficult to operate at a higher professional level.

Pharmacy education shifted after the war from an apprenticeship program with some lectures to more formal one and two year Certificate, Diploma, and Degree programs provided by either, or both, the licensing body and university. Once a province was formed and it began to implement legislation the pharmacists began to press for legislation to control the profession. In most cases this was modeled on British legislation. Because of the close connection between pharmacy and medicine where physicians learned to compound as part of their education and also served as pharmacists in small communities where there was no pharmacy, medical legislation often attempted to cover pharmacy practice. In any case, once pharmacy legislation was in place pharmacists began to lobby for educational programs that would qualify apprentices to pass a licensing exam.

At the 1920 Canadian Pharmaceutical Association Conference, the Education Committee headed by George A. Burbidge (subsequently Dean of the Maritime College of Pharmacy, 1925-43) recommended that there be equivalence among the provinces rather than uniformity. To achieve this they recommended a uniform matriculation standard for entry, a minimum of a two year program with 1,000 hours of instruction, and a committee to set out the syllabus for the two year program. There was also a restatement of the need for preceptors of apprentices to be diligent in their teaching of the application of scientific material learned in class. A commercial course in the curriculum was seen as essential (this issue continued for many years as pharmacy schools believed that the commercial aspects should be taught in the pharmacy). These recommendations of the Education Committee followed from three earlier meetings of pharmacy educators beginning in 1917 (Halley Hamilton Gaetz – Alberta; Alexander Campbell – Saskatchewan; and Henry E. Belcher – Manitoba). The educators did not meet again until 1937.

In Quebec province, the Montreal College of Pharmacy, which was operating independently and providing education in English, became affiliated with McGill University as the College of Pharmacy. Financial problems caused this program to end in 1925. Laval University in Quebec City operated a branch in Montreal from 1906 to 1920, now the University of Montreal, and it continued to operate a pharmacy program in Montreal until 1920 when the University of Montreal was organized as an independent university. The pharmacy program at the University of Montreal continued from that time on. It is the oldest continuing university pharmacy program

in Canada. In 1924 Laval University in Quebec City began a pharmacy program.

In Alberta the pharmacy program was begun in the University of Alberta in 1913. Entrance requirements consisted of three years of apprenticeship and Grade 10 for students who were at least 14 years of age. Students could enter into a one-year Diploma or a two year Phm.B. By 1917 students were required to be at least 15 years of age and complete a two-year diploma. A four-year Bachelor of Science degree in Pharmacy was also implemented and saw the first graduation class of three students in 1921, the first four-year degree program in the British Empire. One of the graduates, A. Whitney Matthews, played a strong leadership role in pharmacy for the next 60 years.

In British Columbia the educational program was mainly apprenticeship and examination with relaxed conditions for returning soldiers. A private school of pharmacy was begun in 1920 with instruction by pharmacists twice weekly in botany, pharmacy, chemistry, and material medica. Two additional private schools and a pharmacy program by the Victoria School Board, which offered night courses, were initiated soon afterward. The development of a university program was a long time coming in British Columbia.

In Manitoba the Pharmacy Association was teaching students in their new building from 1899 onwards. Before that there was an apprenticeship system that had been in effect from the early 1870's. The University of Manitoba offered a one-year Bachelor of Pharmacy program from 1905 onwards. This lasted until 1914 when a University Department of Pharmacy was established to take responsibility for pharmacy education. The program became a two-year University Diploma in Pharmacy with university lectures accompanied by professional practice education provided by the College of Pharmacy. A Bachelor of Science in Pharmacy was initiated in 1920 with the College still participating in providing professional instruction until 1932.

New Brunswick and Nova Scotia relied on the Maritime College of Pharmacy to educate their students from 1917 onwards. A one-year Qualify Course and a two-year bachelor program were offered in conjunction with Dalhousie University. In 1921 the entrance requirements were raised from Grade 10 to Senior Matriculation. A course of four weeks was also offered to Certified Clerks. This was also taken by pharmacy students at the beginning of their program. It was intended that all the clerks would continue their studies but some did not and assumed some professional responsibilities over time that led to problems. George Burbidge became a full time lecturer in Pharmacy in 1922 and Dean of the Maritime College of Pharmacy in 1925. He was an outstanding leader in pharmacy at both the provincial and national level.

The Ontario College of Pharmacy required a four-year apprenticeship as of 1889 with compulsory attendance at some lectures for one year, a two-year program was not a requirement until 1927. The Ontario College of Pharmacy had a building of Gerrard Street in Toronto and it was expanded in 1891 to accommodate more students. This building was used into the 1940's. Dean Heebner was appointed in 1892 and served on staff for a period of 45 years having a strong influence on pharmacy education. One of his first acts was to obtain an affiliation with the University of Toronto. He then instituted a Phm.B. degree program which required university courses and was examined with oral, written, and practical examinations.

In Saskatchewan, the School of Pharmacy began in 1913 as part of the College of Arts and Science. Classes began in January 1914 with 22 students under the direction of Alexander Campbell, a Saskatoon pharmacist. In 1921 the School became a College (a Faculty) with Campbell as Dean. It offered a one-year Certificate course, increased to 2 years in 1924. A four-year degree course was available on a voluntary basis with one graduate in 1923. In 1920 there was a surge of student apprentices back from the war with 66 enrolled in the program. It is interesting in that the number of pharmacists registered in Saskatchewan in 1920 consisted of 40 by examination, 47 physicians, 13 graduates of OCP, one graduate of New Brunswick, and 2 graduates of the Northwest Territories (this region later became Saskatchewan and Alberta).

The pharmacy conference in 1924 passed a resolution that the entry level for pharmacy be the same as that for university entrance. It also recommended a degree program in pharmacy must be four years in length. The four-year degree definition caused some problems later on when the Pharmacy Examining Board of Canada adopted this same requirement. After 1940 all pharmacy schools were committed to a degree program. Alberta had a three-year degree program and when PEBC demanded a four-year program they then moved to a four-year program. Newfoundland also had a three-year program but it was a college program with a 10-month academic year containing as many hours of instruction and was not recognized. This led to a long controversy as Newfoundland pharmacists were unable to practice in other provinces since they could not write the PEBC examination. To practice outside the province many pharmacists sought employment in the federal government as the provinces extended professional recognition to federal employees (armed forces, narcotic control, drug laboratory).

### **Canadian Pharmaceutical Association**

In 1919 the pharmacy conference was held in Winnipeg. It was the first post war meeting and the long gap of five years since the previous meeting meant that there were many issues to be dealt with. An inflammatory issue that arose was that of the word Aspirin. This product had recently been marketed by the Bayer company of Germany and was doing well. The issue that arose was that the Bayer Company in the United States, which was not at war at the time, was buying up carbolic acid to make Aspirin thereby preventing it from going to Canada to be made into explosives. This was apparently a deliberate act. When the U.S. did enter the war the assets of Bayer were seized and sold to Sterling Drug who advertised it heavily and insisted on maintaining patent protection. It continued to do well and recently celebrated 100 years on the market.

The Opium and Narcotic Drug Act of 1920 was a major achievement for government and the profession. Pharmacists had long advocated having legislation of this kind and after some provinces initiated legislation the federal government followed suit. Pharmacists were pleased at the outcome of this endeavor and their role in making it a reality. One aspect, however, caused some problems. Pharmacists recommended that codeine not be listed as a narcotic due to its low potential for abuse. The government accepted this but in the United States it remained a narcotic and exports needed to meet the requirements for narcotics. The requirement was for the Government of Canada to issue a certificate to import the narcotic but the Government would not

do so as it was not a narcotic.

In 1921 a new office was built for CPhA on Church Street in Toronto. The Secretary was finally given a wage and budget of \$5000 - \$6000. Previously these expenses were out of Mr. Gibbard's own pocket.

In 1923 the Canadian Pharmaceutical Journal was acquired by the Canadian Pharmaceutical Association on the death of the editor G.E. Gibbard. In addition to conference, news and information on provincial affairs, and some legislation, the journal also presented scientific tidbits and humor that would be of interest to pharmacists. For example, in September 1923 they described the use of scopolamine in convicts to get them to tell the truth about their crimes. It was used successfully on three convicts in San Quentin Prison in California. There were also jokes, market reports on crude and chemical drugs, poems, business advice, and letters to the editor.

In 1924 the Canadian Pharmaceutical Association conference was held in Calgary. It was recommended that apprentices must sign a code of ethics. Of more significance was the decision to invite Sir Wm. Glyn-Jones from Britain to explain the British Patented Articles Trade Association (PATA) with a view to establishing a similar organization in Canada to establish a "fair price" regime. This endeavor was a high profile issue that galvanized the profession and Glyn-Jones was seen as a savior. Unfortunately he died in Vancouver while helping Canadian pharmacists. The fight for resale price maintenance lasted several decades and consumed a lot of money and time only to fall afoul of the Combines Investigation Act. The profession has had the dilemma of price competition since its origin in Canada. Those who sell at a low price are seen as lowering the image of the profession and in many cases lowering the level of service to the public.

Patient safety was an issue that the professional association addressed by recommending that qualified pharmacists be employed in pharmaceutical manufacturing and in hospital dispensaries. One resolution of the CPhA conference in 1929 was that a licensed pharmacist must show proof of British nationality.

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