

WAR LESSONS OF CHEMISTRY OF 1921 RECALL THOSE OF 1797

Remarkable Parallel in Effect of Chemical Research on the National Defence and on Industry Between Now and Days Following the French Revolution.

How chemistry is a guide for a nation both in war and peace, is recalled by Professor Charles E. Munroe of the National Research Council in Washington, who compares conditions in this country now with those which in 1797 obtained in France.

This report of history was suggested to him by an article by Professor Chas. Munroe, of the chair of organic chemistry of the College of France, in which that great scientist discussed the lessons of the world war.

So strenuously had France been beset by enemies both within and without that the *Annales de Chimie*, devoted to her chemical advancement, were suspended until 1797. The proceeds to the first volume, No. 18, printed after the resumption of publication, is reproduced in a contribution by Professor Munroe, in the January number of the *Journal of Industrial and Engineering Chemistry*, of the American Chemical Society. It is as follows:

"The *Annales de Chimie* have been suspended during three years following the publication of volume eighteen. The necessity for each devoting one's self solely to the defense of the Republic; the events of the revolution; and finally the public occupations and functions of its authors have naturally compelled this suspension. But the time has not been entirely lost to science; chemistry, above all, has been cultivated with an activity and success to which all testify; she has developed for the defense of the country truly unexpected resources and expedients. Her ability to relieve immediately the most urgent needs has rendered her most precious and commendable in the eyes of the lovers of mankind, and of all true citizens. Further, the number of these becoming students has increased each day; it has become a fundamental topic in all modern schools, and above all in those which seek the higher planes of human knowledge.

"Among all the civilized nations, where one works without ceasing for the perfection of reason, the sciences which influence territorial and industrial production, and among which chemistry today occupies first rank are held in general esteem. The cultivation of the fields, the multiplication of animals, the establishment of manufactures, the exchange of industrial creations for the products of other people constitute the true source of the prosperity of nations to which all men are called according to their abilities and where they find, in serving their country, their chief pleasure.

"Chemistry clarifies the practice of the arts; without her neither canancy in products, economy in pro-

cess, nor perfection in operation can be hoped for. Unable to know an advance and to calculate the results, manufacturers have often made errors which have lost them their establishments. Consequently many chemists have in recent years become manufacturers and already France has ceased to be tributary to other nations for a great number of useful products; the preparation of the minerals, acids, different salts, metallic oxides, dyes, and glass, multiplied in France during the last fifteen years, are authentic proof of the insuperable advantages of chemistry. Without the light of this science from where would come the quantities of saltpeter and powder for our armies which were made in the copper, iron, steel, potash, soda, leather, and all the other precious materials which have enabled us to conquer our enemies and to maintain our existence. Without chemistry we would have been helpless.

"At the moment when victory has crowned our efforts, when talent has been recognized and called to the service of the State; at the moment, above all, when the schools have been opened, in the departments which seek to spread knowledge and make known its needs, the authors of the *Annales de Chimie* believe it a pressing duty to go on again with the circulation of this journal. Their aim is to carry the torch of science into all workshops; to make known the process; to describe the little known or unused arts; to improve bad practices; to correct errors which occur too often in many of our factories; to describe means for the utilization of neglected or wasted by-products; to expose the often misleading trade secrets; to carry out a serious character; to establish theories of the most obscure operations; to direct the nearly always unassured or uncertain steps of the manufacturer; to destroy mystery, and to repress fraud. In a word, to spread science in the most exact manner and to increase the varieties of national industry.

"We believe that, without neglecting chemical philosophy, it is its special applications to the useful arts that will clarify and improve those arts. We will not refuse, particularly if they have useful applications, that is, if they are intelligent and reliable artists, manufacturers, workers, and all those to whom this work is especially designed. At the same time savants and philosophers will find records of the progress of physics and the march of human events. It is fine to be able to view the improvement in the arts and also in well doing among a great people."

Campaign For Dom. Wide Prohibition To Be Undertaken

Move Starts in Ontario—
Ontario Alliance Starting
the Ball Rolling.

Toronto, Jan. 12.—An aggressive campaign throughout Ontario for establishing public support in the enforcement of the prohibition act, and for the enactment of Dominion-wide prohibition has been decided upon by the Ontario branch of the Dominion Alliance. County conventions and conferences are being arranged.

It was decided that a deputation be sent to call on the Government, before the opening of the legislature, and urge the desirability of embodying in legislation certain amendments to the Ontario Temperance Act. It was recommended that the action, taken during the recent federal election, should be followed up and efforts made to make Dominion prohibition a dominant issue in the new Parliament.

The question of the annual convention was taken up. Tentative dates submitted were Tuesday, February 28, and Wednesday and Thursday, March 1 and 2. The details of the programme were left with the managing committee.

"Do you think a man should take his wife into his confidence regarding his business affairs?" asked the man who had just been married.

"If he isn't making any money, yes," replied the experienced one, cautiously.

To Stop a Cold in One Day

Take
**Bromo
Quinine**
tablets

Be sure you get
BROMO

The genuine bears this signature
C. M. Brown
Made in Canada

QUEBEC REAPED GREAT PROFITS FROM LIQUORS

Premier Warns Others to
Keep Hands Off; No Prohibition
for His Province.

Quebec, Jan. 12.—Premier Taschereau, in closing the debate on the address in the Quebec Assembly this afternoon, declared that the Quebec liquor law, he held that the Quebec system of government control, was the best and the most practical although total prohibition still had its partisans, its advocates and its apostles.

In the latter province, he said, there was a cry for Dominion-wide prohibition. "Hands off Quebec," he declared, belongs to the provinces, he affirmed, and each was at liberty to have the system it pleased.

"If these good apostles," he said, "strangers to this province, imagine they can think and legislate for Quebec they will be greatly deceived." He invited them to exert the apostolic zeal, their propaganda and the love of their neighbor amongst themselves, where they would find a supple field of action. Quebec would not tolerate any intervention.

Speaking of the taverns and the complaints against them and the beer which contented himself, for the present, to say to the brewers and the tavern keepers that if the system of selling beer was a source of disorder, it would be changed. The Government had suppressed the vendors of alcohol, it would not hesitate to take the necessary measures to suppress all other systems which led to abuses.

Liquor Revenues
Mr. Taschereau announced that revenue from the liquor sales from May 1 to December 31, had reached a total of \$9,325,721.41. He said that it had exceeded all expectations and that the government would realize a profit of four million dollars annually. The sales for the month of December alone amounted to \$2,470,395.35.

Making suggestions as to how the four million dollar profit should be used he thought that the treasurer could put aside a million dollars a year to repurchase the debentures of the province and increase the sinking fund, that a million dollars be spent exclusively for the maintenance of highways, and that the remainder be spent on colonization, agriculture and education.

He held that with this system the debt of the province could be wiped out in twenty years. The government would undertake itself the maintenance of all highways constructed under the Good Roads Act.

Puzzle: Who Was Santa?
Mother—Whoever taught you to use that dreadful word?
Tommy—Santa Claus, mamma.
Mother—Santa Claus?
Tommy—Yes, mamma, when he fell over a chair in my bedroom on Christmas eve.

Man Without Country May Be Forced To Live Aboard Ship

Barred From England, Again
Being Sent to Britain's
Shores by U. S. Officials.

Special to The Standard
Boston, Mass., Jan. 12.—After being delayed 16 hours by the storm, the *Palmon Line* steamship *Sachem* pulled out from her berth at Hoosac locks early today, and departed for Halifax, St. John's and Liverpool. She carried only 64,000 bushels of wheat and 300 tons of general cargo from here, but at Halifax, she will take on 120 barrels of apples and considerable general cargo, and at St. John's she will also load a quantity of freight.

Samuel K. Kienack, the man without a country, who was a stowaway on the last trip of the steamer from the United States, was barred by the British authorities from going to Boston, was taken out again by the vessel, having been excluded from this country. Kienack is anxious to return to his parents' home in Maine, but it looks as though he will be a regular passenger on the *Sachem* for some time to come, for, if the British immigration officials will not allow him to land, he will be brought back here again, and then the United States will take him in hand and for the second time, probably, send him back to England.

The *Sachem* had three passengers, including two young women, who are being deported to St. John's by the immigration officials. The cases were being pending for some time, decisions unfavorable to them being rendered yesterday afternoon.

MAKE NAVY TOP NOTCH IN POINT OF EFFICIENCY

This the Demand Under
Armament Limitation—
Nations in Strong Competition.

Washington, Jan. 11.—Limitation of capital ships is not to be allowed to reduce the fighting efficiency of the American Navy, if the influence of the Harding Administration's responsible naval advisers can prevail. The Transcript correspondent learns an important official pronouncement that effecting this end is not to be done in any respect to pour cold water on the nation-wide satisfaction evoked by the agreement to check ship construction. Its purpose is to counteract radical movements in Congress that seek to exploit the basic success of the Conference of the United States Navy. Facts and figures will be presented to the country showing that a cut of 50 per cent in officers and men such as Senator King, Democrat of Utah, proposes, would in reality mean the 5-3-3 ratio. Such a slash in personnel would mean that we could only half man the Navy the five-power agreement assigns us.

It will be shown that the 5-3-3 ratio, with a 50 per cent reduction in the number of men to fight, our ships would become at two and one-half or even a two-ratio for the United States as against five for Great Britain and three for Japan.

It is felt the American people, in their justifiable enthusiasm over a cessation of competition in dreadnaught building, may overlook a new and significant element that now has entered into the naval situation. While the expensive race in capital ships is suspended, there henceforth will be an intensive competition in excellence of personnel. The competition in a way, naval men point out, thus has not changed its aspect. Instead of the former contest in numbers, size and armament of material units there will be a competition in preparedness and skill of personnel. It is pointed out that the United States, for example, is to have in future a maximum of 600,000 tons of capital ships and Great Britain is to have 500,000 tons. It is held to be inevitable each nation must strive to make every ton count to the utmost limit. That can only be done by making ships to the zenith of efficiency. It is after all, men, not guns or armor plate or torpedoes that "fight," a ship of war.

If the curtailed American Navy is to fulfil the defensive tasks incumbent upon us, those who fixed up the 5-3-3 ratio as our irreducible margin contemplated our fleet would be kept at the top notch in personnel and equipment.

On Jan. 1, 1922, the Navy of the United States had about 1,100 line officers, of whom 60 per cent may be considered adequately trained and experienced sea officers. The others are more or less in the formative stage. In the sudden emergency of international complications there is no other source to which the nation could turn. On strength of 40,000 men is roughly 100,000. With officers and men at present available, the American fleet far from properly manned. Our battleships, both in the Atlantic and the Pacific, are anywhere from 10 to 20 per cent short of their full complement. We have 200 modern destroyers, of which only 50 per cent up to the standard.

Our naval authorities declare the manning of the "Hughes Navy"—the exclusively new fleet—will, together with the shore stations required for its operation and maintenance, call for 6,000 line officers and 120,000 men. Thus, instead of a 50 per cent cut in personnel, 100 per cent efficiency will necessitate a 32-1-3 per cent increase in officers and a 25 per cent increase in men.

Both Great Britain and Japan have enlistment systems that always have given their navies distinct advantages over ours. The British have a long-term enlistment and regulations for retaining control of their experienced sailors after expiration of enlistment period. The Japanese have conscription and can obtain all the men their navy needs any time they are required.

STIR CREATED AT CONFERENCE IN WASHINGTON

Resignation of Briand Causes
Delegates to Wonder if
Agreements Would
be Vitiating.

MIGHT HAVE FAR-
REACHING EFFECT

As Briand Was Responsible
for France Withdrawing
350,000 Ton Capital Ship
Proposal.

Washington, Jan. 12.—Further details of both the Naval Treaty and the shanting negotiations were ironed out today, but the arms delegates gave up hope of a speedy session this week to announce definite results. The "big five" completed its first revision of the Naval Convention and sent the text back to its legal experts for a redraft of the changes made. It will meet again tomorrow and a virtually complete treaty may be ready for an executive session of the full Naval Committee on Saturday or Monday.

Word of the resignation of Premier Briand of France created a stir in conference circles, but the disposition in French quarters tonight was to minimize its immediate effects on the Washington negotiations. Alvaro Sarrazin, head of the delegation, announced that he would go ahead with his conference duties pending instructions from the new cabinet and indicated his belief that the change of administration would not vitiate the agreements projected here.

Among United States officials in the conference, however, there was some apprehension that M. Briand's retirement might have a far-reaching effect on the naval limitation programme. It was pointed out that the retiring premier had been directly responsible for France's withdrawal of her 350,000 ton capital ship proposal, and that the temper of the succeeding Cabinet on that subject could only be conjectured.

Scraps Over Scrapping.
Although described by delegation spokesmen as representing no serious divergence of views, the discussions over methods of scrapping have aroused unusual interest among the naval experts of the conference. In their sub-committee report, the experts recommended that permission be given for conversion of prescribed warships into other craft, and have urged that the provision would represent a large financial saving because of the necessity of constructing new vessels of various classes in the near future.

Liabilities in 1921
Failures Total
Seventy Millions

Toronto, Jan. 12.—The Canadian commercial casualty list for the year 1921, figures for which have now been compiled by R. G. Den & Company, are as follows: Total losses, \$70,000,000; total as regards liabilities, in point of actual number of bankruptcies, the years 1916 and 1917 still exceed any other period, but the \$73,829,111 total of liabilities involved in last year's failures stand 75 per cent higher than the next worst total of \$41,162,321 reported in 1915.

In 1921 there were 2,451 failures, against 1,078 in 1920, and 2,939 in 1916, the record year for financial disasters. By provinces the failures last year totalled: Ontario, 579; Quebec, 1,016; British Columbia, 135; Nova Scotia, 116; Newfoundland, 72; Manitoba, 169; New Brunswick, 81; Prince Edward Island, 17; Alberta, 135; Saskatchewan, 129.

Sentenced to Death
For Murdering Two
Belfast Constables

Belfast, Jan. 12.—Six men were tried today for the murder of Constables Gorman and Lytle in Londonderry Jail last December. Patrick Leonard, Thomas McSheehy and Patrick Johnston were found guilty and sentenced to death. The three others were acquitted but were held for trial on a former charge.

The American enlistment terms are not only short, but our wage conditions both for officers and men, are such that it is proving increasingly difficult to keep other classes in the navy in face of the income allotments offered by employment in civilian life.

Another factor throwing light on the proposal radically to cut naval personnel is to be the fact that ships with reduced complements must employ their men mainly in upkeep. Little time is left them for the drills which will make the ship a real factor in battle. Forces inadequately equipped cannot carry out training which holds individual units to a homogeneous whole.

The limitation of capital ships does not affect many combatant ships and stations of the navy now out of commission. In case of emergency, those, together with our merchant marine, would absorb all the trained sea-going naval reserve force.

ECZEMA
You are the only person who can cure your skin. You are the only person who can cure your skin. You are the only person who can cure your skin.

Cannes Delegates Not Surprised By Rathenau Plea

His Claims, in Behalf of Germany, Lacked Precision and Logic.

Cannes, Jan. 12.—At the Supreme Council meeting today Dr. Rathenau, at the close of his speech, said that Germany was able to meet the London terms of 500,000,000 gold marks in cash, and one billion gold marks in kind annually, but could not go beyond those figures. He explained that Germany's inability to pay was due to the disastrous exchange which had made it necessary for Germany to use marks to buy foreign currency until the mark was a drug on the market.

Germany's exportations amounted in the past year to only one fourth of the exports in 1914, and the balance of trade against her amounted to 2,500,000,000 gold marks. This could not be offset by decreasing imports because Germany was now buying abroad only food and necessary raw materials. So far as could be learned the members of the Council were not favorably impressed by Dr. Rathenau's statement, asserting that it lacked precision and logic.

A Remedy for Piles.
PAINFUL PILES are a guaranteed remedy for hemorrhoids. Instantly relieve itching piles. 60c. Made in Canada.

Died
TILLEY—At Jacksonville, on Tuesday, Jan. 10, Miss Christina Tilley, funeral from her parents' residence on Friday, Jan. 13.

Rich yet Delicate— In every cup of the genuine

"SALADA"
BLACK OR TEA GREEN

will be found a flavour so rich that you may instantly recognise the fine quality of the leaf yet so delicate that it refreshes and "comforts" as no other tea will do. Samples on request. SALADA, MONTREAL.

Chinese Student Believed Dead At Hands of Thugs

Harry See Known to Have
Made Clean-Up at Montreal
Gambling Joint.

Montreal, Jan. 12.—The Chinese Consul of Montreal is convinced that Harry See, cousin of the Chinese Ambassador to the United States, and a 28 year old student, is dead at the hands of thugs who robbed him of \$4,000 in the East end of this city last Sunday.

It is stated that See, who arrived here from Ottawa last Saturday, went to a Chinese gambling house Sunday afternoon and made a clean up. He then visited a house in that section and has not since been heard of.

See was born in the United States and had been a student of the University of Hong Kong, China, for several years. He was on his way to enter a United States University to complete his education at the time of his disappearance in this city.

One Casualty In Halifax From Heavy Storm Along Coast

Woman Blown Down An Embankment Into The North-west Arm.

Halifax, N. S., Jan. 12.—The Atlantic coast storm, which arrived at Halifax at eight o'clock Wednesday evening, accompanied by heavy rains, died away about noon today. Only one casualty has been reported, the drowning of Mrs. Edward Jollimore, who was blown down an embankment at Jollimore into the Northwest Arm.

Incoming steamers today reported a wild night at sea. Steam trawler *Venosta* arrived from the Banks in the midst of the gale, and Captain Myhre reported that he had more than enough rain to wash the ice from his craft.

A southeast gale, varying from 30 to 45 miles an hour, was general over Nova Scotia, but no shipping or damage has been reported.

Paul Whiteman AND HIS ORCHESTRA
make records exclusively for
"His Master's Voice"—Victor
These Six Fox Trols are their latest offering:
APRIL SHOWERS
WEEP NO MORE, MY MAMMY
Record No. 18825-85c.
EVERYBODY STEP
KA-LU-A
Record No. 18826-85c.
SECOND HAND ROSE
HAVE YOU FORGOTTEN?
Record No. 18818-85c.
Ask to hear them played on the
Victrola
at any "His Master's Voice" dealers
Manufactured by Berliner Gram-o-phone Co., Limited, Montreal

J. & A. McMILLAN
Wholesale Distributors for the Maritime
Provinces and Gaspe Coast, P. Q.
**McDonald Piano & Music
COMPANY**
7 Market Square. St. John, N. B.
The C. H. Townshend Piano Co., Ltd.
54 King Street, Saint John, N. B. — 801 Main Street, Moncton, N. B.

Delegations Hear
By City Fair
Exemption from
Sought — Y. M.
Police Protection
Meat
Owing to the absence of
miners Pitkin and Bullock no
was transferred at the committee
of the Common Council
morning. Two delegations were
one in reference to exemption
taxation and the other in regard
shaking championships. In con-
with the latter, the Mayor and
that he would proclaim a half
for the second day of the meet-
Y. X. Mellday appeared with
Pitkin, of Lepreau, and asked ex-
emption from taxation for the
series, Ltd., for a period of five
This request was made under
stated that a big steamship
gunny has been capitalizing for
the incorporation being A. A. L.
Lepeux, C. R. Sticklemy and
Wickerson, both of Eastport,
which would cost, with mac-
from \$50,000 to \$60,000. The
intended to can sardines and
could be run off before dark, a
plant would be operated the
round and would employ from
150 persons.
The favorable consideration
given the request of the com-
the Council, a start would be
within one month. An option
was made a site on the West
Inconveniently, the steamship
the general manager, and Char-
the secretary.
Mr. Mellday said that the co-
was going ahead; it was sim-
question whether it would be
St. John or in Charlotte County.
The Mayor asked that the re-
by placed by writing and that
in consideration when all mem-
the Council were present.
Those interested in the com-
reported objections in this in-
and have several plants in op-
other parts of the country.
Skating Championships.
Messrs. Owens, White and Con-
ed that police be furnished to
the skating track at Lily Lake
days of the races and to keep or-
was said that about fifteen poli-
would be needed. Mr. Owens ad-
in the event of a big storm, de-
fore the races he would like to
on the city supplying men and
to clear the track.
The Mayor asked that the city
do everything in reason to help
meet, as it was recognized that
the biggest thing in the sporting
that had been undertaken in St.
in several years.
In reply to a question, Mr.
said that the track was in fairly
condition yesterday morning.
The Mayor asked at what time
was intended to start the races.
Mr. Owens said that they would
started about two o'clock so that
could be run off before dark.
His Worship said that in that
he would proclaim the half be-
commencing at 12 o'clock so as to
able all to reach the scene of the
on time. The holiday will be de-
for the second day of that meet-
in case of a postponement the ho-
also would be postponed.
The meeting then adjourned.
The Plain Truth.
"So you are engaged, dear?"
"Yes."
"How romantic! Is he your ideal?"
"No," said the other candidly, "he
is the best offer I could get."—Be-
Transcript.
**Catarrh
Of The Stomach
Is Dangerous**
"Thousands Have It and Don't
Know It!" says Physicians.
Frequently Mistaken for In-
digestion—How To Recognize
and Treat.
"Thousands of people suffer more
less constantly from tired, coated
tongues, bad breath, sour burps, ac-
rid, frequent vomiting, rumbling
stomach, bitter eructations, gas, wa-
stomach acidity and call it indiges-
tion when in reality they are suffer-
ing from catarrh of the stomach.
Catarrh of the stomach is danger-
ous because the mucous membrane
lining of the stomach is thickened and
a coating of phlegm covers the in-
face so that the digestive fluids can-
not mix with the food and digest it.
This condition soon breeds deadly
ease in the fermented, unassimilated
food. The blood is polluted and car-
ries the infection throughout the body.
Gastric ulcers are apt to form
frequently an ulcer is the first stage
of a deadly cancer.
In catarrh of the stomach a good
and safe treatment is to take be-
fore meals a teaspoonful of pure Bismar-
Magnezia in half a glass of hot wa-
ter as hot as you can comfortably drink.
The hot water washes the mucous
from the stomach walls and draws
the blood to the stomach while the
Bismar-Magnezia is an excellent
vent for mucus and increases the ef-
ficiency of the hot water treatment.
Moreover the Bismar-Magnezia
is a powerful but harmless antacid
which will neutralize any excess
hydrochloric acid that may be in the
stomach and sweeten its food ex-
cess. Easy, natural digestion is the
distress of any kind should soon be
low. Bismar-Magnezia is not a laxa-
tive, is harmless, pleasant and easy
take and can be obtained from any
local druggist. Do not confuse Bismar-
Magnezia with other forms of mag-
nesia, milks, effervesces, etc., but get
the pure Bismar-Magnezia (powder)
tablets, especially prepared for dis-
turbances.