



# THE CANADIAN PHARMACEUTICAL JOURNAL.

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## Original Papers.

### PHARMACEUTICAL ETHICS.

BY J. T. SHAPTER.

*Read before the Canadian Pharmaceutical Society,  
Dec. 2, 1868.*

MR. PRESIDENT AND GENTLEMEN: It is customary for individuals seeking the attainment of science, to avail themselves of the experience of those whose research has given them a relative perfection in that particular branch to which attention is being directed.

In the formation and progress of the British Pharmaceutical Society we have repeated evidence of the up-hill work attending its existence, and but for the indomitable perseverance of its founders it might have been to-day a thing only in name. The results they have achieved are strong incentives to us in our incipient stage, and as pharmacutists we shall take advantage of their education and experience, not confining ourselves to originality because it might be thought more gratifying or independent. Our lamp burns none the less for lighting our neighbors. The benefit inculcated in this axiom is indorsed by every true philanthropist, and it is our privilege to cull from the literature of the day, the results of the labor of our greatest men, and to make such capital out of their expressed ideas as we are capable of deducing. I have been often gratified and instructed by perusing articles from the pen of Mr. Joseph Ince, an associate of King's College, London, and I was forcibly struck while reading recently a paper of his on Pharmaceutical Ethics, composed by request for presentation at the Conference which met at Nottingham, in August, 1866. It might be read here and transferred to our journal to the advantage of all its members, but its theory is somewhat too exalted to be reduced to practice by ourselves who cater for the million. Mr. Ince's trade associations being exclusively in the upper circle, those outside of that circle would be apt to consider him highflown in theory, while his citations are only adapted practically to the sphere of his own experience. I have therefore taken the liberty of selecting the leading points, and adapting the ideas therein conveyed to our own condition. We will preface the subject by

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quoting Caird's explanation of the term ethics.

He terms it "The doctrines of morality, or social manners, the science of moral philosophy, which teaches men their duty, and the reasons of it; a system of moral principles and rules for regulating the actions and manners of men in society."

An analysis of this explanation would teach us, as members of the Pharmaceutical Society, our necessary qualifications, duties and responsibilities. Assuming that the Pharmacist has received a fair education, and is in this respect qualified to perform his various duties with intelligence and accuracy; it will be generally admitted that he would be still better fitted for his position by having what is usually called moral principle. This may be said of every man, but it seems to have peculiar force when applied to the pharmacist, whose position is one of trust, the interests committed to his charge being so important as to require that even in minute and trifling details his duties should be conscientiously performed, and in many cases the only guarantee to the public is his professional and moral character.

Certain ethical principles are common to humanity, such as prudence, diligence, punctuality, honesty, sobriety, with the kindred excellencies. It would upset the moral government of the world to live without them, and on the assumption that the pharmacist knows and practices these true principles it is taken for granted that he must regulate his conduct by the observance of ethical laws. But while there are ethics which concern humanity in general, there are others which belong specially to pharmacy, and these we will consider.

Our worthy brother must have experienced no small difficulty from the danger of crowding the main theme with details, useful and important in themselves, but relatively of minor interest, and I claim your indulgence if in the transposition I have committed this error. The subject is introduced by Mr. Ince's remarks on "the ethics of the shop." Pharmacy is a trade when a man buys goods at one price to sell them at another, gaining the advantage in tariff, being further influenced by the known law of supply and demand. When he buys in undivided bulk to sell again in undivided bulk, he is a merchant. When he purchases in undivided bulk to vend in large though divided bulk, he is a wholesale tradesman. When he buys articles in divided bulk, to sell again in small divided bulk, he is a retail tradesman; nor does it make the slightest difference whether he sells hats or turkey rhubarb, nor whether the vender of the rhubarb be Sir Humphrey Davy.

The artist, on the other hand, is a profes-

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 Toronto, May, 1868. 1-

sional man One painter buys so many feet  
 of canvas, together with so much paint; he  
 places possibly upon that canvas something  
 which may not increase its value. A second  
 buys the same amount of canvas, inch by  
 inch, on which he puts the same amount of  
 color, ounce for ounce, and the result may  
 be "the Immaculate Conception." He places  
 on the canvas that which he cannot buy.  
 He simply exercises a constituent part of his  
 nature peculiar to himself.

Neither is the true artist influenced by the  
 necessities of competition, nor by the trade  
 fluctuations arising from supply and demand.  
 A hundred artists more or less would not  
 alter his position, and as many painting on  
 the same subject would not detract from the  
 merit of his own. Its value is intrinsic and  
 not relative. But the pharmacist buys  
 his stock, whether of drugs, chemicals or  
 sundries, in order to sell again, he is a  
 tradesman; but let not those who would  
 fain think it a profession, be discouraged by  
 the assertion that there are other influences at  
 work to modify the general fact—the awak-  
 ening claims of universal education, the long  
 unflinching teaching of our parent society,  
 and the actual pressure from without.  
 Then there are influences of locality and in-  
 dividual character, all of which tend to ele-  
 vate us above mere trade instincts, and the  
 more we educate ourselves to meet the  
 wants of the public, the more easily will  
 that which we cannot divest of the term  
 trade assume more or less a strictly profes-  
 sional character.

Never forgetting the essentially trade na-  
 ture which belongs to pharmacy, we at once  
 come to the first ethical rule of the phar-  
 maceutist, viz: the necessity for the abso-  
 lutely genuine character of his drugs. No  
 drug or remedy should be admitted into his  
 store other than that which, in case of dan-  
 gerous illness, he would not hesitate to sup-  
 ply to the inmates of his own family circle.  
 Various are the circumstances necessitating  
 innovations, and it would be an impossibility  
 for a druggist to confine his stock within  
 the precincts of the materia medica; but in  
 no case should any trade casuistry induce  
 him to lower the standard of excellence of  
 whatever he may possess. The pharmaceut-  
 ist who bears this rigidly in mind will be in  
 no danger of degrading himself by the adop-  
 tion of low and ruinous prices. Whoever  
 has committed this transparent trade mis-  
 take must not afterwards blame the public  
 for exacting the continuance of a state of  
 things to which he has himself voluntarily  
 stooped. On this topic I have great pleasure  
 in quoting the opinion of another chemical  
 star, Mr. Brady, of Nottingham. He  
 says: "The principle which ought to

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C. W. WALKER,  
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guide the pharmacist in the regulation of his charges is, that remuneration should increase in proportion as the class of article makes greater demand on the knowledge obtained by his professional education. If he sells articles dealt in by other classes of tradesmen, he must submit to the same ratio of profit. In drugs proper, which require an educated judgment, power of testing and the like, he is entitled to a higher rate; whilst in all matters of dispensing his charges should be professional in their character, and not calculated on the cost of employed materials at all. We cannot materially increase the quantity of medicine sold by reducing the price; hence any of us endeavoring by low charges to increase his business, must recollect that he does it to the direct injury of the body, in reducing by so much the amount of money that might accrue from its legitimate practice. In cities or large towns the responsibility of prices charged rests with two or three leading men, and if they are true to their professional instincts, the calling can scarcely fail to prosper." I think none present will dissent from this theory; it is true, certain locations and other circumstances may demand its modification, but with its details I fully agree.

Our regard to self-respect in connection with trade interest, suggests a third ethical observance, viz: to supply the public with the precise article for which they ask. The rule of every well regulated establishment is to supply faithfully and implicitly whatever a customer may require; to obtain it, if not in stock, and to spare no pains that it shall be the identical thing desired. To do otherwise, Mr. Ince remarks, would warrant so fine a phase as a trade error, but a pure shop mistake. Does the customer want Brown's Chlorodyen, he receives that made by Mr. Davenport; if quinine be ordered, salicine must not be substituted, and so with the whole list of similar preparations, whether demanded as a retail order, or as forming an ingredient in a physician's recipe. This course of action is due, not to any keen sense of honor, but to trade expediency, and any house in city or country adopting such a principle, must gain a reputation which infinitely counterbalances the small extra remuneration to be made out of fictitious articles; confidence reestablishes trade, the aim of all engaged in its pursuit.

Arising out of the preceding remark, and on which the success of the pharmacist depends, is a major ethical consideration that can only be treated in a minor key—that is perfect civility to, and careful attention to the smallest wants of the poorest customer—a civility that on all occasions should be expressed by words and manner. Before dismissing this section I beg to offer

a remark on the relation between the employer and the employed. What I have said applies specially to the employer; but let not the assistant think he stands aloof from the responsibility of his master. It is quite obvious that, the ethics of the trade concern the one as well as the other; let the assistant feel that he has a part to play, just as difficult, and just as important as his employer; that on his side he must exercise consideration, and adopt the high tone of feeling which characterizes the gentleman, and he will do more to render pharmacy enduring, and to promote its social welfare, than whole reams of essays that could be written on the subject. We are free to confess, that the mutualities between masters and apprentices have often been very imperfectly performed, perhaps on both sides, but in very many instances this has arisen from the defective education of the latter, disqualifying him to appreciate his condition, or the attainment of his true position; while masters in taking apprentices, have looked too little to the preliminary education, necessary for entering on a scientific business, they have been unable to impart that special instruction which it is their duty as teachers to inculcate.

But we trust matters are now improving on these points, and that whilst the master is no longer content to lag behind in the general progress of society, the assistant and apprentice, stimulated by the course the Governments are taking for the general advancement of our body, and the duties consequently imposed upon them, will rise above that lax indifference which has so long characterized them. On glancing over the druggist's circular for last month, I met with the following, which exhibited a condition in pharmacy that should be the aim of our society to prevent. The correspondent says: "A brother druggist, a graduate from the Philadelphia College of pharmacy, sent to him a prescription in order to have it explained to him. It ran—Dec. Rad. Althæ 3 oz., with five or six other ingredients. Though written in a plain legible hand, said individual was unable to make out the first line. Another came to him with the following for explanation—Brandy, 3 oz., Vitelli Ovi. ½ oz. Brandy he knew, but the next thing was a something he supposed the doctor ordered 7 pints of, mistaking the Ovi. (not knowing what preceded it) for a term of measure. I trust our Society will see the necessity for imposing such restrictions as will elevate its members to its true position.

This introduces us to another section, embraced in the term *medical ethics*,—a section of the subject that demands our most careful consideration. Owing to the educational pressure from without, and the sense of personal responsibility, the Pharmacist is

daily ceasing to be the mere vendor of his drugs; by recognizing the necessity of thoroughly understanding the nature and properties of remedial agents, he is working out the ethics of his trade. On this topic, Mr. Howden remarks: "The maintenance of the public health requires the services of three separate offices. 1st, The sanitary office, which enforces the observation of natural laws. 2nd, The physician's office, which investigates the nature of disease, and studies the method of subduing it. 3rd, The Pharmaceutical office, which consists in the skilful selection and preparation of remedies, and their direct application; according to the physician's method. By virtue therefore of his own position, and his mutual relation with at least this second health officer, the Pharmacist cannot worthily discharge his duty, unless by deliberate cultivation, he has made himself the fit companion and seconder of the physician."

It has been stated, that, the medical profession look with a jealous eye on the intellectual advance of the modern pharmacist; but I think this is contrary to fact. Why a professional man should trouble because his directions are likely to be understood and properly carried out, is adverse to all logic. The one least likely to interfere with him in a professional career, is the man who knows most of the varied action and the strength of drugs, and the therapeutic value of remedial agents; it was this view that caused the action taken by a few leading members of the profession, which has resulted in the formation of the Pharmaceutical Society. To establish confidence, a mutual understanding must exist; and, should the Pharmacist fail to be the helper, and fit companion of the physician, he has not rightly understood either the dignity of its calling or its moral responsibility. The true Pharmacist will always be the helper, for it is his to know the mechanism of the healing art; to develop new remedial agencies; to enter upon untried regions of experiment; to utilize the dreams of theory, and to bid science wait on the wants of daily life. In all these things the true physician will gladly be instructed; neither will he refuse advice, nor withhold his friendship from one who, though working in a humble sphere, is yet able to enlarge the basis, as well as guide the exercise of professional skill. In this way an understanding grows up, founded on personal advantage, deepened by common sympathy, and cemented by mutual respect. I think the proper course has been followed by our parent society, in opposing all interference on the part of chemists with offices for which they have no qualification; in other words, to draw the distinction between *prescribing* and *dispensing* medicines; and our Society will

do well in this respect to imitate their example. I am far from believing, that any definite line of demarcation can be drawn between the medical sciences or the practices founded upon them; surgery, medicine, and pharmacy, are as much an example of continuity, as the development of species or the co-relation of the physical forces; but I do urge that the offices pertaining to each department should, in common fairness, if from no better reason, be left to those who have special qualifications for their fulfilment.

I trust, I am distinctly understood, that by this, I do not annul the occasional recommendation by chemists of simple remedies in cases of emergency, or for those little ills of daily life, commonly regarded as too trivial for anything beyond homely treatment. This is not what medical men complain of. What is deprecated, is a deliberate trespassing in a province distinct from our own—the interception of practice rightly pertaining to the qualified prescriber. We each have a duty in this matter, and my conviction is, that the line of duty coincides with that of our own interest. It may be urged by some, in defense, that their legitimate calling is injured by so many medical practitioners dispensing their own medicine. While this, no doubt, is a grievance, it is no defense. In a large number of instances, it would be impossible for a medical man to practice without dispensing also, and in many cases, in which we think a separation of the two functions would be easy, we must make large allowances for a custom, strictly legal, which is often followed out of deference to the convenience of the public, even in opposition to the tastes of the practitioner. The relations between medicine proper and pharmacy have been till now so ill-defined, that much forbearance is needed on all sides. While things are settling into their proper order, medical practitioners, from time immemorial, have been accustomed to dispense, indeed, time was when they alone were properly qualified for the purpose; and, for the state of things we desire, we must rely on the change that is gradually taking place in medical education, and which concerns itself less and less with pharmacy and Materia Medica. On the other hand, we may fairly claim from the medical profession equal consideration, since we, like themselves, are but servants of the public, whose ideas of right and wrong, in respect to medical advice can only be reformed by a sort of educational process. Most of all it is for us to show, that practice in those branches of medical science to which we are specially devoted, may safely be left in our hands, and in the mutual confidence thus established. The ground for jealousy will disappear, and we shall enlist the cordial co-operation of all the fraternity. But in

the attainment of this end I hold to the opinion, that a man should cultivate a love for the business of his choice: its exercise should be to him a source of pleasure, and its various occupations should contribute to his happiness—in other words, he should put his heart into the handle of the trowel. With some men this is natural. Thrice happy is their lot; others must acquire the gift—for the heavy discontented spirit is the most sapping of all malign influences. The love of business in our own case involves the love of study, and this is the strictly professional part of our character. On this subject, Mr. Ince remarks: "Of that study which concerns our own immediate necessities, such as the laws of chemistry, the knowledge of plants, and the range of Materia Medica, I say nothing, as the subject is so frequently brought before you that I have taken it for granted. I confess I have a strong bearing to that class of mind which goes beyond this, and loves literature and learning for their own sakes. Nothing (he continues) in my own career has more brightened toil, and lessened the irksomeness of manual labor, than the recollection of a classical education." But if, unfortunately, this is not our case, may we not render it possible for our successors, through the judicious management of our institution. With these remarks, I consign the subject to the care of the Committee.

## Mining.

### ASSAYING FOR AMATEURS.

BY THE EDITOR.

#### CHAPTER IV.

##### *Wet Process for Gold—Another Method.*

Having made a judicious selection of the specimens for assay, so as to represent, as nearly as possible, the general character of the rock from which they were taken—the chippings must be powdered together in an iron mortar, until as fine as ordinary flour. In order to insure uniformity, the powder must be passed through fine muslin, and the coarser particles again subjected to pulverization and sifting until all has passed through; a suitable portion for assay must now be weighed with accuracy. The quantity depends on the richness of the rock; for ores, containing a large amount of metal, ten or fifteen grains will be sufficient, but for comparatively poor ores—as those of our Canadian gold fields, and which usually contain less than one part in thirty-two thousand, it will be necessary to take about two ounces, as the amount of gold contained in a less weight might be unappreciable. It is always proper to make assays in duplicate;

in any case, a second portion of the powder shall be reserved in the event of accident, or failure.

Place the powdered ore in a Florence flask, and pour upon it, carefully, and in small portions at a time, about two ounces of *aqua regia*, diluted with an equal bulk of water, apply a gentle heat until all soluble matter is dissolved, adding more acid and water, if necessary. The changes which may take place under the action of the acid will be as follows:—

Gold will be entirely dissolved, being converted into the tetrachloride. Silver will be found with the insoluble portion as a chloride. Iron, or copper pyrites, will be decomposed, the metal going into solution. If the matrix of the ore be a calcareous or magnesian rock containing carbonic acid efflorescence will take place, with evolution of the carbonic acid, the lime or magnesia being dissolved. Silica or quartz remains unacted on.

The solution must now be decanted from the residue, or filtered through a piece of paper, or through a tuft of cotton wool placed in the neck of a glass funnel, and the undissolved portions carefully washed—the washing being mixed with the original solution. This clear solution must be boiled to about one-fourth its bulk with the occasional addition of a little muriatic acid for the purpose of decomposing any nitric acid which might be present. Otherwise, a small amount of *aqua regia* might be formed which would be very injurious in the next part of the process in redissolving the precipitated gold. To the solution add a few ounces of water, and put it in a clear glass vessel. Next prepare a solution of sulphate of iron, by dissolving a few crystals in water, and filtering. Add this solution to the first, stirring with a glass rod—if gold be present it will be at once precipitated by the iron as a chocolate brown powder, and must be allowed a sufficient time to subside, when the clear liquor can be poured off, and the gold collected and weighed; or fused into a button, with borax, before the blowpipe. When the solution of gold is very dilute a blue violet color will be observed, by transmitted light, which is perceptible when the gold does not exceed one part in six hundred and forty thousand parts of liquid.

If it is desirable to estimate the amount of silver present in the ore, the undissolved residue—which we have said consists of silica and chloride of silver—must be digested with a little strong liquor ammonia, which will dissolve the chloride. The solution must be diluted with water, and a few drops of hydrochloric acid added. The silver will be again precipitated in white flakes, as chloride; it may be estimated as three-fourth silver.

In cases where the iron or copper pyrites is large, and the gold is present in small quantities, another method of assay is advisable. It may be performed by treating the powdered ore, at once, with dilute nitric acid (one part acid to one of water), and heating until all soluble matter is dissolved; decant the clear liquor and wash the residue with water, adding the washings to the solution. This solution will contain all the metals present except gold—and in some cases lead. The silver can be precipitated by hydrochloric acid, and estimated as before. The copper can be readily estimated by inserting in the solution, from which the chloride of silver has been separated, a few pieces of bright iron, the metal will all drop out and can be washed and weighed.

Heat the residue containing the gold and silver with dilute *aqua regia*, the gold will be dissolved. The solution must now be evaporated to dryness and the metal reduced with a little borax, in the blow-pipe flame: the minute globule of gold must be detached from the flux and carefully weighed.

(TO BE CONTINUED.)

**GOLD MINES OF PENNSYLVANIA.**—Dr. GUSTAVE TSCHERMAK has read before the Imperial Geological Institute a very complete account of the gold mines of Pennsylvania. It appears the precious metal is found disseminated in almost imperceptible particles in the trachytic rocks in the environs of Falatima and D'Abud Banya, where it is still worked by the most primitive methods. There are 300 families or partnerships, consisting each of three individuals, or thereabouts. A thousand quintals of the rock yield about 8,500 grains of pale yellow gold, which contain a little silver. The red debris of the crystalline rocks found in the valley of P'Aranyos is carefully washed, and yields about half an ounce of gold to 31,000 quintals of stuff. This gold is of a deeper colour and contains less silver. They also find gold in a peculiar trestone (*Carpathiques bovarides*), which is of a pale color like that found in the trachytes. The gold mines of Pennsylvania have been worked from the earliest historic times, yet they still furnish above 2,000 lbs. avoirdupois annually.—*English Mechanic*.

#### Preparations of Conium, Hyoscyamus and Belladonna.

At a recent meeting of the British Pharmaceutical Conference, D. Hanbury, F.R.S., the President, in alluding to the recent lectures of Dr. Harley, said:

Dr. Harley's experiments on conium seem to me a model of careful therapeutic research. The results are of great interest, proving conclusively that the drug is an active medicinal agent, but one of which the pharmaceutical preparations have been so defective and uncertain, that the efficacy of the medicine had come to be regarded as very questionable. The dried leaf of henlock was found by Dr. Harley to be of little, if any, value; the tincture, whether made from leaf or fruit, to be

inert (except from its alcohol), and the extract to be so weak in conia that is required to be given in doses of 30 to 40 grains to produce the least effect. The only preparation which retains the active principle of the drug in sufficient quantity is the *preserved juice*, which, given in the dose of from 2 to 8 drachms, is a safe and valuable medicine. As to belladonna, Dr. Harley considers that its medicinal powers are wholly resident in atropine, a substance which I, as a druggist, may remark is far more satisfactory to handle than a liquid conia, or a highly deliquescent solid, such as hyoscyamine. Dr. Harley finds that its activity is destroyed by fixed caustic alkalis—an observation previously made, as you will remember, by Dr. Garrod, who also pointed out the impropriety of combining hyoscyamus with a caustic alkaline solution, such as *liquor potassae*. The action of an alkali on atropine is not instantaneous, in fact, the power of the atropine is not apparently diminished when freshly mixed. If, as is probable, the same observation holds good for hyoscyamus, it allows of that drug being administered with potash, provided the two are mixed at the moment of taking the dose, or perhaps it would be still better to give them separately.

#### The Phenomena of Supersaturation.

For a very long period the phenomena of supersaturation in saline solutions have perplexed chemists. Mr. Charles Tomlinson, F. R. S., has been experimenting and theorising upon the subject, and has communicated to the Royal Society his conclusions and the grounds upon which they are based. We have only room to give the conclusions which, if substantiated, are important and interesting to the chemist.

The conclusions arrived at by Mr. Tomlinson are: (1) That a number of hydrated salts from supersaturated solutions and remain so even at low temperature simply from the absence of a nucleus to start the crystallization. (2) That a nucleus is a body that has a stronger adhesion for the salt than for water which holds the salt in solution, a state of things brought about by the absence of chemical purity. (3) That three or four salts from supersaturated solutions which in cooling down deposit a modified salt or one of a lower degree of hydration than the normal salts. (4) That this modified salt is formed first by the deposit, in small quantity, of the anhydrous salt, which entering into solution, forms a dense lower stratum containing less water than the rest of the solution, in which lower stratum the modified salt is formed. (5) That salts of a low degree of hydration from supersaturated solutions, which on reduction of temperature, or by the action of a nucleus, deposit the excess of salt that held the solutions supersaturated, leaving them merely saturated.

**CURIOUS EFFECT OF THALLIUM.**—This substance has the property of entering the circulation, and producing the most offensive odor to the perspiration of the parties taking it. Dr. Bunsen was compelled to absent himself from society for four weeks on this account. This one property will kill it for all practical use in medicine. Its action is similar to zinc and iron on the economy, acting as a tonic, and producing, in large doses, severe headache.—*Druggists' Circular*.

**PUBLISHERS' NOTICE.**

The CANADIAN PHARMACEUTICAL JOURNAL is issued monthly from the office of publication on the Fifteenth of every month. It will always contain information invaluable to Druggists, Chemists and others interested and connected with the sale, compounding, and dispensing of drugs and medicines. The present number will be sent to every druggist in the Dominion, all of whom, it is hoped, will show their appreciation of the enterprise by giving it substantial support. Members of the Canadian Pharmaceutical Association will receive the paper free as of right.

To Advertisers this Journal offers the best and indeed the only medium of reaching by a single advertisement every Druggist in Canada. Our rates, published on the first page, will be found low, and will be strictly adhered to in all cases. Advertisements in order to secure insertion should be in the publisher's hands not later than the end of the month preceding each issue.

The Journal will be under the control of the following Committee, who will be responsible for the due performance of all advertising contracts:

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E. B. SHUTTLEWORTH, Editor.

All Communications connected with the paper to be addressed, post-paid,

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 Toronto.

**CANADIAN PHARMACEUTICAL SOCIETY.**

PRESIDENT, - - - WM. ELLIOT, Esq.

The regular meetings of the Society take place on the first Wednesday evening of each month, at the Mechanics' Institute, when, after the transaction of business, there is a paper read, or discussion engaged in, upon subjects of interest and value to the members.

The Society admits as members, Chemists and Druggists of good standing, and their assistants and apprentices, if elected by a majority vote, and on payment of the following fees:

Principals - - - - \$4 00 per Annum  
 Assistants & Apprentices, 2 00 "

The JOURNAL is furnished FREE to all members.

Parties wishing to join the Society may send their names for proposal to any of the members of the Society. A copy of the Constitution and By-laws of the Society will be furnished on application.

HENRY J. ROSE, Secretary.

## THE CANADIAN

**Pharmaceutical Journal.**

TORONTO, ONT., DEC., 1868.

**THE PROPOSED PHARMAOY BILL.**

The frequent occurrence of cases of accidental poisoning, and the many serious mistakes made by unqualified persons in the dispensing of medicine, render it necessary that some step be taken at once to protect the public safety. Scarcely a week passes without its chronicle of death resulting from the incompetency or carelessness of those persons, whose business it should be to protect human life. Nor can the evil ever be fully told, as only the grossest cases come to light. The so-called complications of disease, or its sudden and fatal termination might, in too many instances, be traced to the pestle and mortar in unskilled hands.

In order to remedy an evil we must first ascertain its cause, and, in this case, it is clearly traceable to that lack of law which permits any man,—no matter how ignorant, or how devoid of experience, to come before the public and by the mere assumption of the title "Chemist and Druggist" to poison all within his reach, by wholesale or retail, as his circumstances permit, or his cupidity tempts. This may be startling, but it is nevertheless true; and it is equally strange that in other callings where no risk is incurred in regard to human life, should a mistake occur, and where property only is involved, the most rigid requirements are enforced by law. There is no profession or occupation— if we except that of physician—in which the power of life and death is so controlled, as in the case of an apothecary.

In European countries the most stringent regulations exist as to the dispensing of medicine. Not only must the druggist have long experience, but also a thorough theoretical knowledge of those branches of science involved in the profession. In Great Britain the recent Pharmacy Act, passed last July, insures adequate qualification by requiring those commencing business to pass a most rigid and thorough examination before the Pharmaceutical Board. This Act has been found to give general satisfaction to the public, as well as to the legitimate druggist; and taking this fact into account, a committee, appointed by the Canadian Pharmaceutical Society, have drafted a Bill, based upon that of Great Britain, and which we have the pleasure of presenting to our readers in a supplement to this Journal.

We give a brief resume of the chief features of the Bill:

The Act commences by declaring it un-

lawful for any persons, except registered chemists, to keep open shop, or dispense, or compound poisons, or assume the title of "Chemist and Druggist," "Apothecary," etc. Poisons within the meaning of the Act, are defined and enumerated in a schedule. They must be properly labelled; those contained in the first part of schedule "A" can only be sold under certain restrictions and to certain persons; but articles enumerated in the second part may be sold by registered chemists without restriction.

Section 4 relates to the formation of a society for carrying out the purposes of the Act, and relates to persons eligible for membership. These must be actually in business on their own account; while clerks, assistants and apprentices may be enrolled as Associates, and, on passing examination, may be admitted as members.

Sections 6, 7, 8, 9, 10 and 11 relate to the incorporation of the Pharmaceutical Society, the formation of a Council, election of officers, and other details connected with the internal working of the society.

The Council are authorized to hold two sittings a year for the purpose of granting Certificates of Competency to those about to commence business. These certificates can only be obtained by passing examination before the Council, or a Board appointed by them, and when obtained, the candidate's name is at once entered on the list of Registered Chemists, by a duly appointed Registrar, and he takes the title of "Pharmaceutical Chemist," which designation is forbidden to all others, except such as are actually in business at the time of the passing of the Act, and who by the payment of two dollars are entitled to registration. Sections 12 to 17 include particulars of the above.

Section 19 places the subjects for examination at the supervision and disallowance of the Lieutenant Governor, together with other details relating thereto.

The dispensing of spirits, wines or cordials, on the prescription of a legally authorized medical practitioner, is provided for in section 23.

Any person transgressing any of the provisions of the Act, shall, for the first offence, incur a penalty of \$20 with costs, and for every subsequent offence \$50. No charges can be recovered in Courts of Law or Equity.

Section 27 reserves the rights of physicians and surgeons, who are not to be held amenable to the requirements of the Act. Nor does the Act interfere with the making or dealing in patent medicines, or with the ordinary business of wholesale dealers. On the death of a registered chemist the business may be carried on by his executors.



From section 28 it would appear that the names of offenders against the Act may be erased from the register, on resolution of the Council of the Society.

Appended is a list embracing all the principal poisonous substances, to the number of thirty-seven, these, with their compounds, are held to be poisons within the meaning of the Act.

We hope the druggists of Ontario will give the proposed bill a careful perusal. It is of vital importance that a measure of some description be passed, and it is the interest of all concerned that the law be as perfect as possible. We shall be happy to receive the suggestions of our brethren, and solicit an expression of opinion on the subject.

### CANADIAN PHARMACEUTICAL SOCIETY.

The regular monthly meeting of the Society was held at the usual place on Wednesday evening, 2nd inst., with the President in the chair.

After reading and adoption of minutes of last meeting, the following were received as members:

#### PRINCIPALS.

Dr. Henderson, Ailsa Craig.  
Wm. Fead, Orangeville.  
E. H. Parker, Kingston.

#### ASSISTANTS.

Jno. Gibbard, junr., Napanoco.  
Samuel Smith, Mount Forest.  
L. Yeomans, Toronto.  
W. Nuthall, "  
J. Heaks, "  
Alb. Cornell, Hawkesville.  
Charles Scott, Clinton.  
John E. Nevills, New Hamburg.  
John S. Lesslie, Orangeville.  
John Blogg, Toronto.  
R. Whitehead, "  
John Buchan, "  
Wm. Mitchell, "  
H. Macdonald, "  
E. Le Maitre, "  
Fred. Clarke, "  
F. Barrett, "  
T. Jones, "  
K. Miller, "  
J. Hatty, "  
W. K. Graham, Brampton.

Communications were read from the Secretary of the Montreal Chemists' Association, giving particulars of the Lecture arrangements made by that Society, and one from Mr. Lowe, of Amherstburg, which will be found in another column. The Secretary was instructed to make suitable replies.

The Committee on Legislation presented the draft of a proposed Act of Parliament,

which was read by the president and discussed by the members.

On motion of Mr. Shapter, seconded by Mr. Hodgotts, a Committee consisting of the President, Vice-President, Treasurer, Mr. R. W. Elliott, and the mover, was appointed to take the necessary steps to obtain its passage during the present session of the Provincial Legislature.

The paper for the evening being called for, Mr. Shapter read one on Pharmaceutical Ethics, which at its close received a warm vote of thanks, moved by Mr. Hodgotts, and seconded by Mr. Massey.

Meeting adjourned.

The name of Mr. James W. Jackson, of New Glasgow, Nova Scotia, was accidentally omitted in the list of names proposed at a former meeting.

The attention of members is desired to the fact that the second yearly subscriptions are due.

BACK NUMBERS.—Nos. 1 and 3 are out of print, but there are still a few of the remaining numbers, which may be had by addressing the publisher, Mr. J. M. Trout. The price is ten cents per copy.

#### Montreal Chemists' Association.

The usual monthly meeting of this association was held last evening in the Chemists' Hall, Toupin's Buildings, McGill street, John Kerry, Esq., President, in the chair. After the usual routine business, Mr. S. J. Lyman delivered a lecture on "The Chemistry of Odors," which occupied over an hour, and was listened to with marked attention and interest. The qualities and nature of odors were described and illustrated, with many interesting facts and experiments. The mode of preparing perfumes was detailed. The uses of odor as a guide to the insect for food, and thus fractifying the plant, by conveying the pollen from flower to flower, were pointed out, as well as a new theory that the perfume of the flower, by its power of absorbing radiant heat, protected the plant from changes of temperature. This was illustrated by the wonderful experiment of Tyndal on the relative capacity of different odors to influence radiant heat. The sources of odors from flowers, animals and chemicals, were alluded to. Samples of linseed oil, which the lecturer had extracted from linseed, and oil of cloves from the clove, by means of sulphide of carbon, without pressure or distillation, were exhibited, and the attention of manufacturers was directed to this wonderful solvent, which bids fair to supersede the hydraulic press in preparing oil from seeds. The lecture was of great interest to the practical chemist, as well as to the student of natural history. At the conclusion a vote of thanks was tendered to Mr. Lyman, and his lecture highly commended in addresses by the Rev. Dr. DeSola, Dr. Hingston, the Chairman, Mr. Mercier, and Mr. Gardner. As Mr. Lyman has been requested to repeat his lecture in public for the benefit of the General Hospital, we forbear giving further details—*Montreal paper.*

### Communications.

#### A Word of Encouragement.

Amherstburg, Dec. 1, 1868.

DEAR SIR,—Enclosed is an order for the sum of Four Dollars, being the amount of my annual subscription to the Society.

I take this opportunity of expressing the pleasure I feel at the progress the Society has made. Every suggestion that I could make has been completely anticipated. This accounts for the absence of propositions or suggestions from those members not resident in Toronto.

I am glad to see that you have made provision for a course of Lectures for the education of junior members, and hope they will profit by them, and thank with you that the materials for illustrating the lectures should be provided by the Society, and not by the student, as some may shrink from attending on account of the expense. But this will cause an outlay which should be raised by a small voluntary contribution, from the Principals, both in Toronto and in the country, as we are all interested in this our first attempt to establish a school to educate our rising members.

Whatever steps may be taken in this matter, I shall be ready with my contribution towards the same, whenever called upon.

I remain yours truly,

JOHN LOWE.

We are pleased to be able to state that arrangements have been made to carry out the suggestions made by Mr. Lowe, and that without exhausting the funds raised in Toronto. The class numbers 27, and is in successful operation. Mr. Lowe sets a splendid example in sending his second year's subscription without solicitation. It will take years of economy to accomplish the objects in view by the Society, under the most favorable circumstances. Economy without a regular income will never achieve one of them.—*Ed.*

#### Hints to Young Men in the Trade.

The following remarks appear in the *Pharmaceutical Journal*, (England), and, although directed to the young men of Great Britain, are equally applicable in Canada:

The present time seems suitable for addressing a few remarks to our young men, especially as the Pharmacy Bill is drawing attention to the qualification of chemists. Great diversities of opinion exist in some minds as to the necessity of such a superior training; in fact, some have said that such extra training and scholarship spoil a man for business. It is to try and upset these opinions that the following views are expressed.

Some have great faith in unions and societies for improving trade; and societies may, in some cases, be of service; but the time has arrived for our young men entering the trade to have correct views, as how much or how little a society can do. Many of us at times are apt to be like the quack politicians of our day, who think they can settle all the affairs of the nation with accuracy and ease, and