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John Uri Lloyd

By JOHN T. LLOYD

Many times during the past months friends of my father, John Uri Lloyd, have asked me to pen the story of his long and active life. This, to the best of my ability, is my intention, but in the limited space available in *The Gleaner*, I shall attempt no more than to briefly picture a few of his distinctly personal characteristics which were so familiar to those who knew him in his laboratory during the latter years of his life.

The events leading to my own connection with him in his laboratory began with his last visit to my home in Ithaca, New York, late in the year 1919. I was then most happily situated, on the staff of Cornell University.

I can distinctly picture him as he sat that day in a wicker rocker near a north window, through which he watched the fury of Winter's first hard blizzard, while with scarce a turn of his head he could peer into the open hearth fire. I sensed that some subject of more than usual importance was coming up for discussion, though at first his attention seemed centered on the snow that was swept past the window in horizontal blasts. As I waited he extended an arm toward the window with hand turned abruptly downward while he contemplated the fine crystals that sifted in and lightly fell upon the angle of his wrist, then suddenly transformed into minute specks of moisture. Finally, with elbows resting upon the chair arms, he placed the spread fingertips of his two hands together, crossed his right ankle over his left thigh, slightly above the knee, and proceeded to speak. I describe his positions in detail because they were as characteristic of him. as was his small, erect stature, his quick, springy step or the kindly sparkle of his vivacious, gray-blue eyes. That day his voice carried more than its usual earnestness as he told me briefly of the bitter conflicts he had passed through during his early and middle life. Almost always he had identified himself with the minority because, as he said, the minority must have right on its side or it would be crushed by sheer weight of numbers.

Among the principles he upheld that brought the greatest condemnation upon him were his views on chemistry, as expressed in his lectures to the students of the Cincinnati College of Pharmacy and The Eclectic Medical Institute. These courses were started with the usual accepted theories, illustrated on the board by formula depicting reactions. But before the end of the course he would move the board aside with the words, "we come now to a higher chemistry that cannot be explained by signs and symbols. I call it *mass action*." For his views on "mass action" he was vigorously condemned as a heretic. He lived, however, to see his "mass action" under the name "colloidal chemistry" universally accepted, and himself recognized and honored as one of its earliest workers.

Continuing, he explained that when my education started he could foresee no end to the strife that had always been his lot. Into this he did not want me thrown as my heritage from him. For this reason he had discouraged my following in his footsteps and had encouraged me to make research in the university my life work. In this I had exceeded his expectations. Aside from directing the problems of a small number of selected graduate students, my time was devoted to my own research in biology, which he had considered the happiest and most useful course I could follow. But times had changed. The principles for which he fought, in most cases, were victorious and the bitter personal antagonism to him on account of these principles was no longer felt. Could he but have earlier foreseen the lessening of the forces that strove to crush him he would have had me working by his side. But, he continued, I had become established in the University. My friends and my work were there. There I would spend a happy life and he was content to have it so.

As he spoke, I realized that he wanted me with him in the work he had long ago started and in the business which had grown from that earlier work. Personal sacrifices for me and my two sisters he had always made. The opportunity had now come for me too to sacrifice for him.

Possibly one of the happiest hours of his life came some weeks later when I told him that with the least possible delay I would sever connections with the university and take up my duties by his side.

In my new position I stepped at once into the laboratories where Father worked. He and I both realized that from him more was to be learned than from all other sources. Accordingly not a detail of what he did was allowed to escape me. So indelibly those impressions were recorded that my mind's eye still pictures his skilled handling of tube, pestle and percolator almost as clearly as if he were again standing before me. As in the stance and swing of the skilled golfer his positions and motions of limb and muscle were always the same in performing each act. There was coordination and grace born of long practice in every motion. At the steam bath, for example, he would always stand with left hand on his hip, thumb to the front, while he stirred with rod held in right hand. With each breath as he blew the fumes from the surface of the liquid, he always made a thin, faint whistling noise. This rhythmic whistling was a familiar sound in our laboratory during the last years of Father's active work. Strange as it may seem, the whistle was a matter of great pride to him. As a boy he suffered more than a little embarrassment because he was not able to whistle as did other boys of his day. Well I remember how, during my early childhood, he would pucker his mouth as if to whistle but would make only shrill vocal sounds. On one of these occasions Mother explained to me that I must not appear to notice anything peculiar about Father's attempts at whistling because he was sensitive on that subject. But the same dogged persistence that overcame so many obstacles throughout his life would not let him rest as long as one of his boyhood's ambitions remained unattained.

It does not take great flight of imagination for those who knew him best to picture him as a boy, slight in stature, sitting alone in a secluded spot of the Kentucky forest, the long rifle with which he was so adept leaning against a nearby tree trunk, while he vainly tried to whistle. But not until one day in late after life while blowing vapor from an evaporating dish, did his first true whistle sound. It was an accident, but a triumph just the same. It was repeated over and over and over again. And for the remaining years of his life the thin whistling sound always triumphantly accompanied his work over the evaporating dish.

Even to the last he was in many ways noticeably influenced by the strict economy necessitated during his early years when improvised apparatus of discarded kitchenware connected by hollow Elder sticks or gourdvine tubes served for his chemical experiments. Late in life, surrounded by the most modern apparatus he clung to the use of fragments of litmus paper almost as small as could be torn from the standard strip. In like manner many other habits of economy born of necessity in his boyhood persisted through his bountiful after life and undoubtedly exerted important influence on the efficiency of his manufacturing methods in guarding against the waste of any valuable drug constituents. Unhampered, as he believed, by the conventional routine education of the class room, he developed methods and procedures that were climaxed by his well known extracting apparatus.

Until I joined him only one other man was ever taken wholly into Father's confidence. That man was his plant superintendent, William J. Miller. In his younger days Father placed the greatest confidence in Miller. In later years he leaned heavily upon his younger shoulders. If he could look back now his thanks to Miller for help, and even guidance, during the many long years of close association would undoubtedly be exceeded by gratitude for undying loyalty to his memory. With others in leaderless confusion, Miller has persistently kept his head and at great personal sacrifice used it to carry out the wishes and perpetuate the plans of his departed friend and associate.

We were dealing with drugs as nature produced them. Not with isolated principles. It was the practical application of "Mass Action," "the higher chemistry that cannot be explained by signs and symbols." Probably for this reason Father did not record the working formulas, even of our most important products, until toward the end when he finally yielded to my insistence.

In his opinion the experience and understanding of men who have worked long in the field is all important while products, as we make them, cannot be produced by workers who lack the understanding born of experience, even though they conscientiously follow written directions.

Although the greater part of Father's experimenting was done in his private laboratory he was familiar with every piece of apparatus and with every operation in the manufacturing departments. In practice they were the laboratories which brought his test tube experiments to practical conclusions. Without them his work could not have been done.

At least once each day for years after I joined him Father and I accompanied by Mr. Miller watched the manufacturing, giving careful attention to every detail of manipulation. It was on one of these early trips, among the great percolators and extractors that the magnitude of my work as well as its responsibility was realized in a way impossible among the smaller apparatus of the experimental laboratory. As we passed among the steam jacketed evaporating kettles a man was stirring the contents of one.

He seemed too deeply interested in its color, viscosity or some other quality apparent only to the initiated eye to take much notice of our presence. And I, too, was deep in thought. That kettle with its mysterious contents seemed to take hold of the vague reasonings of my mind and crystallize them into definite form. Here was a man doing a certain thing and intently watching the progress of the operation. When it reached a certain point he would do something to it. Possibly he would stop the operation possibly he would add just enough of something to bring about some change apparent only to his experienced eye. And the ingredient he might add? Was it too dependent upon the hand of experience in its making?

At this point Mr. Miller took the stirring paddle from the worker, moved it about in the contents of the kettle, raised it slowly and critically watched the drip, then handed it back to the assistant who silently continued as if accustomed to such interruptions. Apparently satisfied that all was going well in the kettle, Mr. Miller turned with a smile and continued with us through his laboratories.

No mention was made of the kettle and its contents,

but what I had seen carried and drove home its message. It is the experienced hand and eye of Mr. Miller that guides every important phase of every manufacturing operation.

As time passed my own eye became trained to perceive and, through experience, my mind trained to interpret the signs and signals of drugs in our manipulative processes. At first the signs were almost imperceptible, their interpretation could be learned only through long contact with them under process of manipulation in our own laboratories. I have sometimes been asked if previous work in other laboratories would not have proven of value to me. So distinctly different are the processes and apparatus employed by us from those in use elsewhere that no amount of work in other laboratories could take the place of experience with our own apparatus. And even more valuable to me was the long and close association I enjoyed with the man who invented the apparatus and worked out the processes-my Father.

As the years passed I gradually assumed responsibilities and just as gradually Father relinquished to me the routine he had so long followed. Though the change came gradually it became complete before the final end. For a considerable time, though he was scarcely ever absent from his establishment, Father seldom ventured beyond the private office in which so much of his writing had been done. In the laboratories his step was seldom heard. The sacrifice I had once made in severing my university connections to take my place by his side was bearing a rich harvest in the satisfaction that came because I could carry on while he took the belated rest so well deserved.

The daily trip which Father, Mr. Miller and I made through the laboratories was much more than merely for the purpose of inspection. They were made to observe the behavior of our various preparations during each stage of their manufacture. It was upon such observation that much of Father's knowledge of plant pharmacy was based. All too often the test tube of the experimental laboratory fails to show that which the thousand pound percolator plainly exhibits.

Almost always these trips would terminate at a high wall desk, in a room crowded with huge copper vessels.

Here Father, a man of very small stature, would perch on a tall stool in front of the desk. With the heel of his left shoe hooked over a rung of the stool, his right leg at about the ankle would cross the left leg just above the knee while his hands clasped around the left knee. In this characteristic position he would lean back, his arms acting as guys to support the weight of his body. This posture was as characteristic of the man as was the familiar raising of his right index finger with the expression- "Listen!" before he started a public address. To this wall desk Mr. Miller would bring graduate or beaker with samples drawn from percolator or concentrator. Here he would make report on their progress and behavior. Here, perched on the high stool, Father would subject almost every sample to the test of his remarkably keen sense of smell and taste as well as to preliminary physical and chemical examination.

In retrospect nothing else in my entire experience stands out with such photographic clearness as the impressions left by Father at work in the laboratory he founded. And nothing else that he did is so indelibly impressed upon my memory as the expression he used so many times during those last few years when he had ceased to work in the laboratories in which so much of his younger life was spent. Often then I would take tube or beaker to him. On these occasions the old interest would flash back and when I came to leave, his words would always be "Tom, you are doing fine. Keep it up."

With almost twenty years of work to familiarize me with the operation of every department of our establishment that has to do with the extraction of drugs, and most of these years spent by the side of my Father, I alone am in position to carry on from the point where he left off. My intention is to do all I can to "*keep it up.*"

Therapeutic Notes

JABORANDI

This is a drug that is often indicated. It is prompt' and decisive in its action and should be in more general use. We have not had occasion to use its alkaloid, Pilocarpine, to any extent, so we shall confine our remarks to the use of the Specific Medicine Jaborandi.

We usually prescribe about one-half dram to the 4-oz. mixture, giving a teaspoonful of this dilution every two hours. We like its action in diseases of the heart and kidneys, where there is suppression of urine and diminished secretions, with the skin hot and dry.

Jaborandi is useful in the albuminaria of pregnancy, but if the heart action is weak, its effects should be watched carefully and it should be given in small doses, if at all. It has a decided action on the glands of the skin as well as the salivary glands. We have given it in cases of measles where the eruption is slow in appearing. It is a quick acting drug in this disease, particularly in adults. It is also useful in any of the other eruptive fevers. In inflammation of the parotid glands and the mammary glands, it will be found efficient. It has a kindly action in inflammatory rheumatism where the parts are swollen and tender. Other remedies may be indicated also, but Jaborandi is a valuable adjunct to the treatment of these conditions.

There are times when a copious diaphoretic is needed. This drug does the work, particularly if given in the form of an infusion.

The indications for the use of Jaborandi are as follows: Deficient secretions; muscular pain with swelling of the tissues and increased temperature; hot, dry skin, mouth dry, pulse full and strong. The urine is of high specific gravity and of a deep color. Its use must be watched if there is feeble heart action.

VERATRUM

We use very little Veratrum internally these days, not because it is an inferior drug, but because of the nature of our work. We seldom have occasion to use it internally, but do use it daily as a local application. In contusions and bruises, where the skin is not broken, or in severe strains of the wrist, elbow, or ankle, we saturate a pad of gauze' with Veratrum and bind it firm to the affected part. When it becomes dry, it can be moistened with lukewarm water. Keep it moist for 24 hours, and apply a re-dressing. We keep it on our surgical dressing table at all times.

APOCYNUM

We have heard physicians and also patients complain of the nauseating action of Apocynum when given in the ordinary dose in a 4-oz. prescription. This undesirable action can be eliminated if the drug is administered in capsules. We frequently prescribe five drops every three hours in capsules with no nauseating action.

ARNICA

Everyone has heard of the use of Arnica as a local application in contusions, sprains, muscle strains, etc. Even the laity are familiar with its use in that manner.

Did you ever use it internally? If not, try it some time to relieve muscle pain following over-exertion, such as soreness of the long muscles of legs from running, soreness of long muscles of back from stooping and lifting when not accustomed to work of that kind. It is also a slight stimulant. Give five drops of Specific Medicine Arnica in water three or four times daily.

-E. P. ZEUMER, M.D.

Strength of Specific Medicines

Physicians often times ask the strength of Specific Medicines compared to tinctures, fluid extracts or the specialties of other manufacturers. Simple though this question may seem on first thought, the comparison in most cases can not be easily made.

To understand how two preparations of the same drug can differ in qualities, let us consider a very simple hypothetical example. Suppose the crude drug contains equal amounts of two familiar constituents, shellac and sugar. In this simple case, if an extract be made with strong alcohol the product will contain shellac but little or no sugar. If, on the other hand, an aqueous menstruum is used, the sugar will be easily extracted but the shellac will remain in the drug. A half and half mixture of alcohol and water will dissolve some sugar and a small amount of shellac, but will not dissolve them in the same proportion. With even a slight change in the alcoholic per cent of the menstruum, there will be a decided change in the proportion of the two ingredients.

In like manner a slight difference in the solvents used to extract a medicinal plant may make a decided difference in the constituents extracted, and a corresponding difference in the value of the preparation.

No plant is as simple as the imaginary example cited, yet the principle is the same in all. In making medicines from vegetable drugs we not only have to do with the action of solvents on simple constituents with different solubilities like shellac and sugar, but must also deal with the complex reactions of the extracted constituents themselves.

From the example cited, which illustrates but one of many factors determining the quality of medicines, it should be readily understood that preparations made by different methods and with menstrua of different strengths must differ not alone in the amount of the dominant energetic constituent which determines *strength*, but also in the proportion of less energetic constituents, which is an important factor in determining *quality*. In manufacturing Specific Medicines it has ever been our aim to produce balanced preparations in which the energy of no constituent overshadows the milder action of valuable but less energetic principles.

The dosage of Specific Medicines should not be gauged by the quantity or action of anyone constituent or any one separate, but by the therapeutically balanced relation of all of the drug constituents desirable for the purpose for which the preparation is designed. -JOHN T. LLOYD.

Some Useful Remedies

THUJA

Recent interest in the use of sclerosing solutions for treatment of various conditions such as varicose veins, and particularly the use of a Thuja preparation for the injection treatment of hernia, has caused some uncertainty on the part of many physicians as to just what preparation of Thuja should be used. A short review of Thuja may be helpful.

The branchlets and leaves of *Thuja occidentalis* are the parts used in preparing various products for both internal and external use.

Thuja has been used in medicine for more than two hundred years. Von Boerhave mentions its use in dropsy. Hahnemann introduced it into Homeopathy. Its use in Specific Medication is comparatively recent. In 1882, Dr.

J. M. Scudder in an editorial in the *Eclectic Medical Journal*, mentions its use as a local application in enlarged cervical glands, in association with powdered Podophyllin as a poultice.

Dr. A. J. Howe introduced this drug as well as *Pinus canadensis*. He used a tincture of the fresh leaves, applying it to warts and condylomata, but did not have much success with it in treating venereal warts. He wrote: "It will deaden fungous granulations and utterly destroy them in some instances. But the best action of the drug seems to be in treating rapidly spreading epithelioma." Today medical progress probably offers better methods of treatment.

According to Jahns and Wallach, three camphoraceous bodies were obtained by distillation, viz: *dextro-pinene*, *laevo-fenchone* and *dextro-thujone*. There is a constituent of the leaves, a bitter glucoside, *pinipicrin* and an astringent coloring matter, *thujin*.

Thuja is stimulant and antiseptic, with general action resembling that of the turpentine group, especially savin. *Thuja* has, therefore, been used as an internal medicine and applied locally in atony of the female reproductive organs, characterized by free catarrhal discharge. It has been credited as being an abortifacient, but is probably secondarily such an agent, primarily acting as a severe gastro-intestinal irritant.

Tissue changes, involving the epithelial and subepithelial structures, seem to be the chief field of the use of *Thuja*.

Much of the reputation of *Thuja* rests upon its use in the treatment of hydrocele, a method introduced by Dr. A. J. Howe, which is familiar to and used by many physicians today. The green *Specific Medicine Thuja* is the form recommended for the treatment of hydrocele and also as a sclerosing solution in the injection treatment of hernia.

Colloidum Thuja is of more recent introduction. It is of a brown-red color and carries the astringent and aromatic principles of the drug. It has the advantage of mixing well with water or other menstrua. The taste is pleasant and odor fragrant. It may be used for internal administration in all conditions and indications calling for *Thuja*. Many successful prescribers, however, still prefer to use the (green) *Specific Medicine Thuja*, upon which the therapeutic use of *Thuja* is founded.

Felter's Thuja is an aqueous solution of *Thuja* without the resin. This form may be used internally in doses of from one to forty drops. Its chief use, however, is in the treatment of chancroid, and it may be used as a urethral injection in the later stages of gonorrhoea. Dr. Felter, who introduced this form, recommended this formula:

℞ Colorless Hydrastis
Aqueous *Thuja* aa 3i.
Aq. Dest. q.s. ℥vi. M.

Sig: Warm and use as a urethral injection three times daily. If much irritation and soreness be present, add one ounce of *Specific Medicine Hamamelis*.

Long's *Thuja* (*Ointment of Thuja*) is limited in its use to treatment of diseases of the eyelids, especially granular ophthalmia and simple trachoma.

INTERNAL USE OF THUJA

Indications: Bladder irritation and enuresis with atony, in children and the aged; urinary incontinence in the aged, with dribbling; loss of urine from exertion from coughing; catarrhal How from bladder and genitalia of both sexes when due to lack of tone. Locally, fissures in ano; prolapsus ani; pruritus of mucous surfaces. Warts, nevi, urethral caruncle.

AMBROSIA

Specific Medicine Ambrosia is made from fresh Howers of *Ambrosia artemisiifolia*, Roman Wormwood. This plant was once much used as a remedy for injuries and known as a vulnerary. It was used as an infusion of the whole plant, also extracted with an ointment base in the presence of heat, and used as a treatment of ulcers and hemorrhoids. Ambrosia was much in favor as a medicine for febrile conditions accompanied by putrescence, and in diarrhea and dysentery with this characteristic. It was thought to be of some value in mild passive hemorrhage from mucous membrane, particularly of the bowel.

Recently it has been used in conditions simulating hay fever, with sneezing, excessive irritation of nasal mucous membrane and of the mouth and throat with free mucous discharge. Its therapeutic action resembles that of *Asclepias* and *Euphrasia*, although its effects are not so marked. With constant burning, itching and stinging sensation, accompanied by frequent severe sneezing and swelling of nasal mucosa, much relief is produced by the use of Ambrosia. It is more useful in the acute stages of coryza, rhinitis, and in milder types of hay fever, as an agent for symptomatic relief rather than for cure. Just what causes relief of symptoms is not known, but there seems to be a definite selective action upon all mucous membrane, but more particularly upon the upper respiratory tract.

Ambrosia is not a powerful remedy, but is of value in a limited field and will well repay further clinical study. To obtain therapeutic action one should begin with fairly large doses, ten minims of Specific Medicine Ambrosia being given in water every two to four hours. It gives promise of being a useful agent in the treatment of allergic rhinitis, especially that due to sensitization against ragweed pollen, particularly the giant ragweed.

It may be thought of in severe forms of mucous colitis because of its effect upon the intestinal mucosa. Not a great deal has been done in this field with the remedy, but it was formerly much esteemed in diarrhea and dysentery, both by oral use and as an enema of its infusion. Ambrosia is tonic, stimulant, astringent, and in a limited sense, antiseptic.

PISCIDIA

Specific Medicine *Piscidia* is made from the bark of *Piscidia Erythrina*. The supply comes mainly from the West Indies. Rarely it is found growing in Florida. The active principle is called *piscidin*.

Piscidia is a powerful agent whose chief action is narcotic. It resembles opium in its pain-relieving properties, without the constipating effects of opium. Cutaneous and salivary secretions are augmented. Systolic blood pressure is at first raised, then lowered slightly, by therapeutic doses. The pupils are dilated; reflex activity lessened; vomiting; convulsions; rapid weak pulse. Dyspnea has occurred from a single dose of 30 minims. In animals death is caused by heart failure, heart depression, or rarely by respiratory paralysis. In early studies by Ott (after its introduction by Hamilton) much enthusiasm was shown by many physicians regarding its use as a substitute for opium, because of its freedom from various by-effects of the latter drug. Nausea, depression of heart action, and inconsistency of its action, have resulted in a diminution of its popularity.

With those who understand the limitations, indications and contra-indications of *Piscidia*, it remains a very useful drug in treating painful conditions resulting from direct nerve involvement. *Piscidia* seems to exert its chief action upon the cranial nerves, and especially upon the branches of the trifacial and of the cervical plexus. Amidon has shown its value in post-operative pain in the Eustachian tubes following tonsillectomy. Its chief use is to relieve pain, overcome spasm, allay nervous irritability and secondarily to promote sleep. (Felter.)

In cough of spasmodic character it may be used alone or combined with other indicated remedies. In irritability of the uterus, with or without pregnancy, it may be used as a uterine sedative. The same holds true for ovarian neuralgias and dysmenorrhoea. In the very young or the very old, *Piscidia* should be used very cautiously, if at all. Insomnia of the aged may yield to cautious doses of the drug.

The local external use of *Piscidia* has been attended with some success in such conditions as toothache with exposed dental pulp, alveolar abscess, peridental inflammation and neuralgias due to these causes. For its pain relieving effects it has been employed full strength or as a ten per cent. ointment in suitable base, for relief of external hemorrhoids. Even in the face of so many newer remedies for the relief of pain, *Piscidia* continues to retain the confidence of many careful prescribers.
-CLOYCE WILSON, M.D.

Case Reports*

From The Dispensary

Woman, white, aged 38, well developed and nourished. Now being treated in another department for active syphilis. No other history of note. Present complaint, poor appetite, pain under right shoulder blade, shows slight icterus, skin and conjunctivae. On first treatment, *Chionanthus* and *Chelidonium* used with no results. Small doses of Calomel followed by salines, results negative. Gave 10 drop doses of Sp. Med. *Chionanthus* every four hours for three days with complete relief.

Man, white, aged 70, apparently in good health otherwise, complains of sore throat. Onset characterized by chilliness, followed by dryness in the throat and irritation in naso-pharynx. Throat became sore, painful, swallowing difficult. Examination shows mucosa swollen, congested especially the anterior and posterior fauces. The following prescription was given:

R_x Sp. Med. *Collinsonia* ʒijj.
Aq. Dest. q.s. ʒiv. M.

Sig: A teaspoonful every four hours.

Patient returned in three days. Examination of throat showed a more normal appearing mucosa, no congestion, irritation subsiding.

"*Collinsonia* affects chiefly the nervous system and mucous membranes. It also stimulates the vagi and those parts supplied by these nerves. "-(Felter)

Woman, white, aged 37, weakened debilitated state; conjunctivae pale to the point of whiteness; pale mucous membranes; white coated tongue with reddened tip and edges. Complains of indigestion, easily fatigued, constipation, growing irritability toward family. Laboratory analysis, routine urine, negative; red blood cell count, three million per cu. mm.; hemoglobin, (Sahli) 65%. Patient placed upon the following:

R_x Sp. Med. *Nux Vomica* gtt. x.
Sp. Med. *Damiana* gtt. xx.
Lloyd's Iron ʒij.
Sp. Med. *Cuprum* gtt. v.
Lact. Pepsin Elix.
Aq. Dest. q.s. ʒiv. M.

Sig: A teaspoonful three times a day before meals.

Patient appeared at successive weekly visits. Blood count two weeks after beginning treatment showed increase to four million per cu. mm.; hemoglobin (Sahli) 80 %. Two months after placing patient upon treatment she was improved as to general appearance, appetite, disappearance of melancholia. Digestion improved, atony of bowels disappeared and movements became of normal frequency and she noticed an increased ability to work.

Report of Case of Renal Stone

In the passage of a renal calculus through the ureter, pain was well controlled by the use of *Subculoyd Lobelia*. Patient upon first visit was writhing with pain. Immediately after first subcutaneous injection of the agent, pain was lessened. This case was complicated by a very bad heart lesion which had caused several attacks of syncope within the last few months. There was no pallor nor cyanosis during any of the period of passing of the stone. The pulse remained regular and strong. Color pink, showing good aeration and circulation of blood in the capillaries of the lungs.

*Reports of actual cases from the Union Bethel Clinic, Cincinnati, O.

Author reports the use of Subculoyd Lobelia in relaxation of tight passages in other locations such as in gall bladder disease. He requests reports of similar cases in which Subculoyd Lobelia has been used.

A Novel Echinacea

Recently I came across the following quotation from Sir Henry Gauvain in Leonard William's "Middle Age and Old Age," p. 72:

"Sunburn may contribute to the onset of sunstroke or heat stroke, by making the subject ill through absorption of the produce of damaged tissues," and it reminded me that I have been intending for some time past to write you on this subject as of possible interest for *The Gleaner*.

My son (a Cornell graduate) who has specialized in organic and pharmaceutical chemistry, reasoned that if Echinacea relieves the unpleasant symptoms following poisoning from bites, stings and septic infections generally, it should also be helpful where the poison is not external, but is a product of the breakdown of bodily tissues themselves. In such cases the broken down cells and miscellaneous debris is produced in such quantities as to tax seriously the blood's ability to carry it away within a reasonable time.

Any burn would be an example of such a case, and specifically, an extensive burn. After prolonged exposure to the sun, although he is well tanned, my son has noticed a tightening across the forehead, heaviness in the chest, some muscular aching especially in the extremities and slight nausea.

The administration of Specific Medicine Echinacea, one-fourth teaspoonful in enough water to make it palatable, followed by a half to whole glassful of water, repeated at intervals of half hours for from three to six times, has invariably relieved the untoward symptoms mentioned, and left only a sense of well being and increased vitality which is so characteristic of proper exposure to the sun.

I do not recall ever having seen a reference to the use of Echinacea for this purpose, but the reasoning seems correct and it certainly does get results. In the same way I should use it after any extensive burn, in serious muscular fatigue, and even recommend its use in connection with the alteratives, in relieving some of the distressing effects of tissue breakdown in old age.

I should appreciate some comments, especially as to how Echinacea acts in rendering poisonous matter harmless and enabling the blood to carry off larger amounts than it could otherwise comfortably handle.

Treatment of Common Diseases*

PAROTITIS (Mumps)

This is an acute contagious disease affecting the salivary glands. It is usually considered a disease of childhood, although adults may be affected. The cause has not as yet been discovered, although it is considered by many to be due to a filterable virus.

This disease may be complicated by an epididymo-orchitis. This is rare in children but occurs frequently in adults. It is generally unilateral and in many cases results in atrophy of the testicle. The organ may become involved but this is not a common complication. Mastitis may occur rarely.

Patients suffering with mumps should be in quarantine. Adults should be confined to bed for several weeks if possible to prevent orchitis.

Very little can be accomplished by local treatment, although a 5 per cent. guaiacol cum lanolin ointment apparently gives relief.

We usually prescribe internally:

R _x Sp. Med. Aconite	gtt. v.
Sp. Med. Phytolacca	gtt. xxx.
Aqua Dest.	ʒiv. M.

Sig: Teaspoonful every one or two hours.

Should orchitis occur, the above prescription is continued throughout the course of the disease. The bowels should be kept open and a light diet is preferred.

*Editor's Note-This is one of a series of articles on the treatment of common diseases by Dr. E. P. Zeumer.

Reprinted from the Eclectic Medical Journal.

PERTUSSIS (Whooping Cough)

Pertussis is a contagious disease characterized by the peculiar spasmodic cough, often ending with a so-called whoop.

It is epidemic and apparently more frequent in the winter. Bronchitis and pneumonia may follow an attack of whooping cough. Cerebral hemorrhage and cardiac dilatation may occur.

The disease should not be looked upon lightly and treatment should begin early to avoid unpleasant and severe complications. Because of the complication, the disease may have a high mortality particularly in infants and young children. The mortality in adults is low.

The patients should be quarantined for at least six weeks. Several authors claim that the disease is not contagious after the first three weeks. Experiments with vaccines as a preventative measure have proved of no great value. The patient may be allowed to be up and around unless the disease is complicated with bronchitis or pneumonia, but should not be allowed to expose himself to cold air.

On account of the tendency to vomiting it is sometimes difficult to keep the patient well nourished. Should vomiting occur after a meal, an attempt should be made to have the patient eat again and he may possibly be able to retain the food.

Local applications have practically no effect in treating this disease. It is a good procedure, however, to apply a snug binder about the abdomen as a protection against hernia.

As to medicinal treatment it can be said that pertussis is not *cured*. Our efforts should be confined to giving the patient relief and lessening the number and severity of the paroxysms.

Belladonna is one of our best remedies and is best prescribed as follows:

℞ Sp. Med. Belladonna gtt. v. to x.
Aqua Dest. ℥iv. M.

Sig: Teaspoonful every one or two hours.

Drosera has long been in use by Eclectic physicians. The explosive spasmodic cough, croupal in character, calls for its use. It is also valuable in the cough of measles. The dose is from one to ten drops, according to the age of the patient.

A number of years ago Dr. Wm. P. Best called my attention to the use of solanum carolinense as a remedy for whooping cough. While it does not cure the disease, it allays that irritable spasmodic cough better than any other drug in my hands. I have had more satisfaction following the use of solanum than from any other drug. The dose is usually 5 to 20 drops in water, three or four times daily. I have never noticed any untoward action following its use.

Vaccines should be given some consideration. The mixed vaccines seem to be favored by many clinicians. It appears that if given in the early stages or in the incubation period, the disease is milder. Their use should not be frowned upon as they may have considerable beneficial action, although not curative.

PLEURISY

In discussing the treatment of pleurisy we do not wish to go into the secondary infections such as the pleurisy associated with tuberculosis, carcinoma, traumatism, or other infections. We will confine our remarks to acute pleurisy or fibrinous pleurisy.

As in all other acute inflammatory diseases, it is usually ushered in by a slight chill, followed by a temperature which is ordinarily from 2 to 4 degrees above normal.

The patient usually complains of sharp sticking pains in the side. In some cases the pain is of lancinating, excruciating character. A dry, unproductive cough is usually associated with the disease. A friction rub is usually heard over the lower and lateral portions of the chest.

The acute pleurisy patient complains of pain and our first duty is to make him as comfortable as possible. It has been customary to immobilize the affected part by strapping it with adhesive tape. We find greater relief is obtained by binding the entire lower part of both sides of the chest with a wide bandage extending completely around the body from the nipples to the lower margin of the ribs. Several strips of 2 inch adhesive tape are placed over this bandage which helps to make it more firm and overcomes the possibility of its slipping downward. This allows free movement of the upper part of the lungs but limits motion in the lower part.

Internally, we think of aconite in small, frequent doses to lower the temperature and to lessen the inflammation if the pulse is small and frequent. Occasionally the full, bounding pulse, calling .or veratrum, is present.

As pleurisy is an inflammation of a serous membrane, we usually give bryonia. Bryonia is the remedy above all others in painful diseases of the chest. Our favorite prescription also includes the use of asclepias. It acts as a mild diaphoretic and rightly deserves its common name of pleurisy root.

℞ Sp. Med. Aconite gtt. v.
Sp. Med. Bryonia gtt. x. to xv.
Sp. Med. Asclepias ʒi.
Water q.s. ℥iv. M.

Sig: Teaspoonful every hour.

The pain may be so severe in some cases as to necessitate the use of an opiate. Morphine 1/4 gr. may be given hypodermically, but in the usual run .of cases the compound powder of ipecac and opium is the best pain reliever for continued use in either pleurisy or pneumonia. This combination relieves the pain, quiets the nervous irritability, increases expectoration, and relieves the cough. It also has a favorable action on the temperature, due to its diaphoretic action.

Should the disease progress into a serofibrinous pleurisy, or develop an empyema, or show evidence of tubercular infection, we are looking at a different picture. For the acute pleurisy, however, I believe the treatment as outlined above is all that is required.

The fever is not high as a rule, but in most instances the indications for aconite and ipecac are present, which will lower the temperature and relieve the intestinal irritation. Professor Locke, in his talk on sodium sulphate (Glauber's Salt), would dwell at length on the value of white liquid physic in the treatment of dysentery.

For the benefit of some of the younger men who possibly are not familiar with this mixture I will give the formula as given to us by Dr. Locke:

℞ Sodium Sulphate lb-ss.
Water ʒ J ss.
Dissolve and add
Nitric Acid ʒi.
Hydrochloric Acid ʒi.

Dose: Tablespoonful every half hour until free evacuation occurs and then continue in smaller doses. It has been said that this comes nearly being a specific for this disease.

If the tongue is red and elongated it will be found that magnesium sulphate 1 dram to 4 oz. water-teaspoonful every hour, will also work nicely. This will help relieve the pain and tenesmus. Do not use it in infants or in severe cases as it is necessary to avoid dehydration.

Where there is tenesmus and pain in the abdomen which is relieved by pressure on the abdominal walls, dioscorea in fairly large doses will give relief. To an adult 10 drops in a little water can be given every two or three hours. It is non-toxic and no harm can follow its use. Infants and children, of course, will require smaller doses.

Where there is griping and tenesmus with pain pointing to the umbilicus, tongue and lips pale, the following will give relief:

℞ Sp. Med. Colocynth gtt. v.
Sp. Med. Nux Vomica gtt. v.
Aqua Dest. q.s. ℥iv. M.

Sig: Teaspoonful every one or two hours.

When the patient complains of a constant desire to go to stool attended by great pain, it may be necessary to prescribe an enema of tr. opium 15 drops to 1 oz. of starch water. This should be retained as long as possible and will relieve the pain and allow the patient to rest.

It may be necessary to resort to 1/4 gr. morphine hypodermically in order to give relief.

Should the amount of blood passed with the stool be excessive, it may be necessary to prescribe as a mild astringent Sp. Med. Capsella, 10 drops every two hours.

It is important that the Aconite and Ipecac be continued in small doses throughout the disease. If this is done there is little reason to expect a great amount of hemorrhage.

Some cases present evidence of sepsis and the tongue may show the indication for sulphite of soda. If the stools show mucous shreds and are of a thin, watery, prune-juice character, baptisia will be indicated.

Echinacea and Potassium Chlorate may also be indicated.

The case may progress and finally assume the form of a chronic dysentery. About 5 per cent, acute cases become chronic. The treatment for these chronic forms is unsatisfactory and will have to be continued over a long period of time. Astringent washes per rectum can be used. Ulcer of the lower bowel should be treated by local application. The general health of the patient should be maintained and a well-regulated diet prescribed.

Serums and vaccines have not given satisfactory results. Sp. Med. Geranium and Epilobium have been used successfully by many physicians. -E. P. ZEUMER, M.D.

Oenanthe Crocata

The "Gleaner" presents the following review of Oenanthe crocata in the hope that it may stimulate reports from practicing physicians who have used this drug in the treatment of epilepsy and allied conditions. This arti. cle is not to be construed as a recommendation for the use of Oenanthe in all forms of epilepsy; so little is known of the action of this drug in disease conditions and there are so many other agents used, that we do not desire it to be substituted for any accepted line of treatment that is giving satis. factory results. However, by proper evaluation of the drug, we believe that it will become a valuable addition to the physician's list of remedies.

Recent inquiries regarding the treatment of epilepsy by the use of Oenanthe crocata have made it seem wise to search the literature regarding the use of this drug.

Oenanthe crocata is a plant indigenous to Europe, and has caused many cases of poisoning both in animals and man. The active principle is probably carried by an acrid resin. So far as known it has not been isolated any further than the resinous state.

Probably the greatest amount of work on the use of Oenanthe in epilepsy of children was done by Dr. Edward A. Tracy of Boston, formerly School Physician of the Boston Public Schools, also a director of Forsyth Dental Infirmary. The preparation used by Dr. Tracy was developed by the late Professor John Uri Lloyd. Dr. Tracy conducted his research with both animals (mainly the monkey) and mankind, in both cases from the experimental and therapeutic standpoint. His work was preceded to some extent by that of Dr. F. H. Fisk. Dr. E. R. Waterhouse also used the remedy, both in epilepsy and in other nervous lesions. He used it especially in various cases of tabes dorsalis with apparently very good results. Little has been done in the further study of this very powerful drug excepting that of the late Dr. T. D. Adlerman, Neurologist, who wrote a very comprehensive article on the use of Oenanthe crocata in the epilepsy of childhood and adolescence.

The chief use of Oenanthe has been in those cases of epilepsy characterized by marked anemia of the cerebrum and upper spinal cord. It seems to have its action in increasing the circulation of blood to these parts.

The use of remedies for which no known antidote is known is attended by some danger, and in the administration of this drug very small doses should be the rule in the beginning of the treatment. For example, ten drops in a four-ounce mixture for the adult and five drops in four ounces for children; a teaspoonful of the mixture every four hours. At the first sign of severe headache, which by the way, resembles that caused by nitroglycerin, or signs of gastro-intestinal upset or severe trembling, pallor or fever or rapid pulse, the drug should be immediately stopped and its elimination begun by means of free bowel action and stimulation of the kidneys by large amounts of water and other diuretics.

Supportive measures should be instituted, probably caffeine, it being an effective quick stimulant. The patient should remain very quiet and rest in bed for a day or so, then the drug may be cautiously begun again. It is not known how much of the drug is stored in the tissues, such as the liver, spleen, muscular system, etc., so it is quite possible it may have a cumulative effect which comes on very rapidly.

Recently a physician in one of the prominent southern hospitals has used Oenanthe in a selected group of cases under his observation. These cases range from one case of petit mal to cases of varying degrees of severity up to several very severe cases of grand mal. The limit of dosage he set was three drops of Colloidal Oenanthe in one teaspoonful of water four times a day. In a number of his cases he had to reduce the dosage when the patient complained of pain, apparently along the course of the cranial venous sinuses. He felt that some of these could have taken larger doses without harm, until the characteristic headache appeared. Colloidal Oenanthe was used in these cases. In no case did he begin with a large dose but worked up from half a drop to the dose mentioned above. In the case of grand mal, he found stronger sedatives to be preferable, such as Luminal or Phenobarbital.

In one case of petit mal where the patient had from six to ten seizures daily, it was observed that Colloidal Oenanthe in three-drop doses, three times a day, cut the attacks down to two a day, and the attacks were much lighter than formerly.

In all cases it was found that the patients were made more or less free from constipation, which is very common in such cases, and either used no laxatives for some time or occasionally a very mild laxative.

It was necessary to stop medicine on one case of petit mal because of the necessary absence of the physician who did not care to place the patient in the hands of one without understanding of the drug. This patient had complained of the typical headache for a few days, but when the drug was stopped he complained of pain in both eyes for some time. Ellingwood gives the toxic effect upon the eyes as a signal for caution. It was felt that as the drug was under investigation, anything that might happen to the patients would be blamed on the drug. The patient himself later begged for the administration of the drug again because of the relief it had given him. This report states that the author believes further study is necessary, possibly with laboratory animals particularly to note how much of the drug is stored in various parts of the body and how rapidly it is excreted. Thus it might be possible to avoid the occurrence of rapid toxic symptoms that might prove fatal.

In the toxic cases when the patient complained of headache, Dr. Silver gave doses of Epsom salts, left off the medication and forced fluids.

From the literature, dating back to 1920, up to the present time, it seems that Oenanthe is a drug of promise, in the treatment of epilepsy and in similar diseases of the central nervous system, which will repay further study and the discovery of the particular field of use in which it is indicated.

-CLOYCE WILSON, M.D.