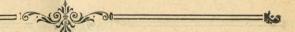


Mull Over These Two Ideas

In the Meditations, Marcus Aurelius said, "We are made for co-operation, like feet, like hands, like eyelids, like the rows of the upper and lower teeth. To act against one another is contrary to nature, and it is acting against one another to be vexed and turn away."

* * * *

Biot, in an address at the Academie Francaise, gave voice to this gem: "Perhaps your name, your existence will be unknown to the crowd. But you will be known, esteemed, sought after by a small number of eminent men scattered over the face of the earth, your rivals, your peers in the intellectual Senate of minds; they alone have the right to appreciate you and to assign to you your rank, which no princely will, no popular caprice can give or take away, and which will remain yours as long as you remain faithful to Science, which bestows it upon you." (Bulletin of the Medical Society of Kings County—New York).





Centenary of Lister's Birth

April 5th, 1927.

WHEN Lister was Syme's house surgeon in Edinburgh, he had twelve dressers under him. Godlee, in his life of Lister, says: "For dressers it is almost more important to serve under an experienced house surgeon who can and will teach them, than to be attached to the most distinguished surgeon. The twelve were not slow to appreciate their good fortune. They called Lister 'The Chief,' a term of affection and loyalty which clung to him amongst his disciples for the rest of his life."

"THE CHIEF."

His brow spreads large and placid, and his eye Is deep and bright, with steady looks that still. Soft lines of tranquil thought his face fulfill—His face at once benign and proud and shy. If envy scout, if ignorance deny, His faultless patience, his unyielding will, Beautiful gentleness, and splendid skill, Innumerable gratitudes reply. His wise rare smile is sweet with certainties, And seems in all his patients to compel Such love and faith as failure cannot quell. We hold him for another Herakles, Battling with custom, prejudice, disease, As once the son of Zeus with Death and Hell.

WILLIAM ERNEST HENLEY



Arthritis

(a) Factors in the Etiology. (b) Diagnosis of Focal Infection.

By PHILIP McLARREN, M. D., Halifax, N. S.

(Based on an address at a symposium on the arthropathies, delivered before the Halifax Branch, N. S. Medical Society, Nov. 10th. 1926).

A RTHRITIS is the oldest of recognized clinical conditions, references to it being found in pre-biblical literature, and its results seen in the skeletons and tissues of mummies and Stone Age relics. It is, even to this day, very frequently met, and, along with the common cold, asthma and cancer, to quote familiar examples, is still a grave problem in which our best efforts often prove unavailing.

Discussion will be confined to certain factors in the etiology, with special reference to focal infection and the diagnosis of this con-

dition.

From the numerous classifications, into clinical, etiological and pathological groups, it is evident that the literature is obscured by nomenclature. The opinion is growing that, with the exception of the congenital, neuropathic, static, traumatic and gouty types, there are common causal factors of which focal infection is the most constant and important, either alone or in association with biochemical or immunological changes.

It is necessary to be granted as a premise that focal infection can produce systemic disease. In this day the focal infection "theory" of resultant systemic pathological sequelae has advanced to be regarded as an accepted and valuable contribution to medical science.

A suitable definition of focal infection is that given by Post of Chicago in the Nelson System. "Focal infection is the term applied to generalized or localized systemic disease resulting from infection or bacterial intoxication, arising in some focus of infection. The infectious agent or its toxin enters the blood-stream or lymph channels at the site of the focus of infection and is carried to some other part or parts of the body where the bacteria may set up inflammatory disease or their toxins may give rise to various pathological disturbances."

Given focal infection as a *predisposing* cause, *activating* causes are numerous, namely such conditions as lower the general or local resistance or immunity, for example,—cold, fatigue, malnutrition, lack of exercise, debility from age or disease, local trauma and lowered vitality from endo—or exo-toxins, as constipation, alcohol, etc.

Some other factor is certainly associated, as many individuals have focal infection without demonstrable sequelae, and just how immunity is lowered, allowing toxic or metastatic changes to commence in joints or other areas subject to invasion from focal infective sites, is still the subject of much recent work. The literature is full of encouraging research toward a solution of this problem. Biochemical changes, endocrine dyscrasia and sympathetic disorder have been suggested as associated causes.

A group headed by Pemberton, now of Philadelphia, has been studying *biochemical changes* in arthritics with known focal infection for

the past ten years.

They report, and are supported by many other investigators, the presence of a decreased carbohydrate tolerance, with resultant elevation of blood sugar, in over 76% of arthritic patients with focal infection. This intolerance is proportional to the severity of the arthritis. Further, an abrupt return to normal follows removal of the focal infection, and, conversely, acute exacerbations of a chronic focus causes a rise in the blood sugar readings. They definitely exclude altered alimentary absorption, which their critics suggested as a cause for the hyperglycaemia.

This work furnishes a scientific basis for the undoubted success,

in many cases, of dietetic measures.

They also report increased oxygen saturation of the blood.

Finally, Pemberton and his associates quote experiments in which they alter the capillary flow to a limb by posture, thereby producing just such findings as are found in arthritis, namely increased blood sugar and oxygen, the inference being that these substances accumulate through tissue metabolism being lessened in the partially occluded areas.

In their experimental cases restoration of normal capillary flow

caused a return to normal biochemical findings.

Further, in arthritics, measures to increase the capillary flow in affected parts by physiotherapy of various types caused improvement both clinically and on blood analysis.

They have thus indicated that altered capillary circulation is a

clinical pathological finding in arthritis.

Other biochemical research has shown variation in blood calcium, cholesterol and lactic acid but no practical application or evaluation of

these results is available as yet.

A practical result of this work of Pemberton *et al* has been the dietetic treatment of arthritis. Lowering the caloric intake as nearly as possible to the basal requirement, with particular attention to reduction of carbohydrate ration, is proving a valuable remedial measure, especially in the proliferative types. This improvement, clinically, might be explained as due to improved tissue metabolism through correction of the hyperglycaemia, or, according to another theory, to lessened intestinal toxaemia or altered flora as a result of a change in the quantity or quality of the food.

Some disorder of the endocrine system in association with focal effect has been reported in arthritis. A familiar example is the arthritis in women at the menopause which is benefitted by opotherapy.

The association of arthritic changes with thyroid disorder is frequent. Llewellyn draws attention to the frequency with which Grave's syndrome is associated with rheumatoid arthritis and suggests that endocrine disorders play a part in the evolution of the "arthritic diathesis."

McCarrison and Mutch both comment on the "frequent association" of the arthritides with thyroid inadequacy.

Vines presents evidence to link up parathyroid dysfunction with lowered resistance to infective processes. He and Groves quote 20 arthritides with improvement in 80% under parathyroid therapy.

The relationship of endocrine dyscrasia and focal infection,

whether cause or effect, presents a fascinating problem.

The blame has also been laid on sympathetic system hyperirritability and food allergy, even in the absence of focal infection.

Focal infection may exist:-

1—Without demonstrable sequelae.

2—With the effect of lowering the systemic resistance,

3—With frank secondary infective sequelae.

The occurence and character of the secondary manifestations of focal infection depend upon:-

1—The number, virulence and kind of the bacteria in the focus.

2—The degree of tension due to mechanical obstruction to natural drainage.

3—The degree of vascularity in the primary and secondary sites.

4—Individual susceptibility or adventitious lessened immunity. Under this heading come the exciting causes referred to above, and, most probably, the associated biochemical and endocrine changes which may be regarded as "preparing the soil", if not, indeed, having a more fundamental bearing on the etiology.

5—Lowered local resistance in the invaded tissue due to impaired

blood supply, trauma and localized sensitization.

The association of impaired blood supply in the invaded tissues is indicated by Pemberton's work. In the pathology of arthritis it is considered that bacterial emboli lodge in the local capillaries, thus inducing impaired vascular supply and introducing the infective factor.

The effect of trauma is a common clinical experience.

Localized sensitization will be referred to below.

6—The specific elective affinity of the organisms.

This last property, selectivity, is of great importance and has been demonstrated satisfactorily by Rosenow. Familiar examples of selectivity of a blood infection to particular tissues are acute rheumatic fever, pneumonia and typhoid. It has been repeatedly shown that in the great majority of cases the injection of streptococci from the tonsils or affected tissues of arthritic patients into experimental animals will be followed by localization of the bacteria in the joint structures of the host.

Reference must be had for further discussion of this most interesting phase and of transmutability of bacteria, both conditions of great importance in our subject, to the published works of Rosenow and his colleagues and to the practical and readable book of Billings, as time will not allow further reference here.

Focal infection is considered to act in four possible ways:-

1—By haematogenous infection,

2—By lymphogenous

3—By systemic intoxication,

4—By anaphylaxis.

The haematogenous route is the most frequent. The organisms enter the venous channels or through the thin walls of the new capillary buds which Nature throws out in an effort to wall off the focus of infection. The process is truly metastatic and these bacterial emboli travel in the blood stream until they come to rest, in the capillaries of some distant tissue, the incidence of which will depend on the factors enumerated above.

In *lymphogenous* infection the route is by way of the lymphatic channels. As the lymphatic system plays an important role in resistance to infection the incidence of this type is high. In most instances the bacterial invasion is arrested in the lymph nodes. In others the organisms become localized in the glands where they may persist and perpetuate the infection, even after the removal of the primary focus or portal of entry. In virulent cases there may occur cellulitis, thrombophlebitis and bacteremia.

In both the haematogenous and lymphogenous types the secondary lesions become "relay stations" and new areas of focal infection. This feature accounts for many clinical failures after removal of primary foci.

The third mode of effect is by systemic intoxication. The systemic effects of the group of exo-toxic organisms, for example, tetanus and diphtheria have long been known. The endo-toxic groups commonly found in focal infection, as streptococci and staphylococci, are now considered to be able to produce systemic intoxication by means of their being broken down by autolysis or the defensive reaction of the tissues. More common than arthritis, as the end effect of this type of focal infection action, are debility, anaemia, fatiguability, irritability, insomnia, neurasthenia, and various psychoses.

Finally, as to the *anaphylactic* phenomena resulting from focal infection. There is much evidence, (Post), to indicate that there is developed in certain cases a general or local sensitization to toxic bodies derived from primary and secondary foci of infection.

Small quantities of foreign protein at a site of focal infection may enter the blood stream, setting up a reaction to this antigen and the development of antibodies. The subsequent introduction of more antigen results in the typical anaphylactic reaction, which is so frequently manifested by the clinical picture of asthma, angio-neurotic-oedema, urticaria, erythema multiforme, eczema, etc., or general vaso-dilatation and hypotension.

This may seem a far cry to arthritis, but, apparently, local sensitization of tissues, as joints, may occur and the anaphylactic reaction may be manifested there by soreness and swelling of the sensitized

structures.

This anaphylactic reaction is considered by many as the probable cause of the common "flare up" of the metastatic secondary lesion when the primary focus is removed. This clinical experience must be considered when advising surgical removal of foci in the presence of grave or even minor secondary manifestations. Permanent local damage may be caused by this exacerbation. Death has occurred from the extraction of one tooth. The too frequent removal of all diseased teeth at one time should only be undertaken after careful clinical review of the case.

The local reaction of exacerbation may also be explained by the well known negative phase phenomenom such as follows an overdose of vaccine. The compression, trauma and opening up of new avenues of absorbtion at the time of operative removal of a focus may be assumed to cause a flood of infective material to enter the blood stream, overtaxing the degree of immunity which the body has established and causing a temporary lowering of resistance and a flare up at the site of secondary infection.

The next point for discussion is the diagnosis of focal infection in

the arthritides.

* * * *

To arrive at an opinion as to the presence and indications for removal of possible foci absolute "team work" between specialists in diseases of the eye, ear, nose and throat, the dentist, the radiologist, the bacteriologist and the internist is required.

That focal infection is an almost constant factor as shown by

statistics.

In 400 cases of arthritis Pemberton demonstrated foci in 73.25%. Billings reported 411 cases with focal infection in 94%. Others, with the advantage of every diagnostic facility, report 100% focal infection.

The presence of focal infection in a patient with arthritis would be indicated as a result of careful investigation of:—

- 1—The history.
- 2—The general clinical picture.
- 3—The temperature record.
- 4—The blood findings.
- 5—The examination of smears, cultures, etc.
- 6-Non specific protein injections.

7—Finally, above all, a routine search of the areas in which focal infection may occur, being guided by the history but passing over none as frequently more than one focus is involved in a given case.

To recapitulate:-

- 1. A careful *anamnesis* is of great assistance, and will afford a clue as to the probable locus of the suspected focus.
- 2. The patient may present the *clinical picture* of apparent good health, but more probably will exhibit signs of other clinical conditions considered to be sequelae of focal infection. In this day almost every disorder has been attributed to this cause but certain syndromes and clinical states are quite well established as resulting from focus infection.

As evidence of systemic intoxication there may co-exist debility, neurasthenia, etc., already referred to.

Resultant upon anaphylaxis there may be present one or more of the clinical phenomena of this condition such as were listed above.

Due to metastatic invasion of other tissues a survey of the systems of the body should be made. The *locomotor system*, beside the arthritis, may reveal periarticular changes, bursitis, fibrositis, teno-synovitis, myositis, osteomyelitis, myalgia, etc. Investigation of the *nervous system* may show neuralgia or neuritis of any spinal or cranial nerve, myelitis, meningitis, herpes, chorea—and, of special importance, involvement of the structures of the eye.

The alimentary system may be involved by secondary ulcer, appendicitis, enteritis, colitis, cholecystitis, cholangitis, pancreatitis, etc.

A survey of the *urinary system* may disclose pyelitis and associated sequelae, nephritis, etc.

The blood vascular system is frequently affected by the development of anaemia or degenerative and inflammatory anatomical changes.

The *lymphatic system* may show secondary involvement of the lymph glands, which, if found, may afford a clue as to the causative locus through an anatomical knowledge of the area drained by the infected glands.

The respiratory system must be examined for bronchitis and other sequelae.

Even thyroiditis and exophthalmic goitre have been linked up with focal infection.

One or more of the above conditions being found will render the presence of a septic focus or foci more probable and its identification and eradication more imperative.

It is also important to remember that these secondary metastatic conditions may continue as focal feeding areas even after the removal of the original primary focus. This feature is an argument for the timely and *prophylactic removal* of focal infection discovered during routine annual, insurance or other examination.

- 3—An elevation of body *temperature* may only be present during periods of exacerbation. Rectal readings during late afternoon may reveal an otherwise easily missed low degree of pyrexia.
- 4—The *blood* findings are most important and include the blood picture, chemistry, culture, and specific complement fixation tests.

Repeated blood pictures should be made.

A degree of secondary anaemia is to be expected.

There is a diversity of findings as to leucocytosis. At times of activity or exacerbation there is a rise to 9-12,000, on an average. with counts as high as 20,000 in the more acute states. With the leucocytosis there is usually a differential rise in the polymorphonuclear neutrophiles. Examinations should be made at the same time each day, under similar conditions, and a persistent count of over 8,000, excluding the normal post-cibal rise of 500-1,000, is good evidence of focal infection. In other instances with a chronic focus which has not produced an antigenic reaction, or where the infective process is well walled off, there may be found no numerical change, or even a leucopenia of 5,000 or under. In these cases, however, a differential change in the percentage of mononuclears is usually found, as chronic foci exert an irritant effect on lymphoid tissue. There may be stimulation, or, more rarely, destruction, of lymphocyte development. The interpretation of all blood findings by a clinical pathologist is necessary. An eosinophilia, excluding skin lesions, asthma and the anaphylactic group, intestinal parasites and malignancy, is strong evidence of a gonorrhoeal focus.

Estimation of blood sugar and test administration of glucose is easily done and important. Other biochemical findings are too

indefinite at present to be of diagnostic value.

Blood cultures may supply the link between focus and secondary lesion, but can only be of use during periods of acute exacerbation.

Complement fixation tests have been used to determine the strain of organism and, of course, for the diagnosis of lues and gonorrhoea.

- 5—The injection of a non specific *protein* has been reported as a useful measure. There occurs a reaction at the site of focal infection, thereby disclosing its presence.
- 6—Bacteriological examination should be complete as in this way the indication for removal of a suspected source can be best determined. Further, proof of causal interrelationship of primary and secondary lesions can often be obtained.
- 7—The special procedures just indicated are to be interpreted and practically applied by a careful *scrutiny* of the areas in which focal infection may be found.

The tonsils and teeth are most accessible and most frequently bear the brunt of the assault. They are, however, the most frequent offenders. In the series of 400 cases Pemberton found the tonsils causative in 71% and the teeth in 45.73% of the cases in which a

focus could be demonstrated. 26.62% had both dental and tonsillar infection and 13% some other combination. Next in frequency he

reports 17% with a genito-urinary focus.

The examination of the *teeth* must include a search for pyorrhoea, gum abscess, sinuses, swellings, lymph nodes, and teeth tender to pressure, with reference to dental specialists for tests for vitality by faradization and for X-ray examination. It is the devitalized tooth which comes under suspicion, particularly after middle age which is the period of incidence of dental focal infection. Rosenow reported all devitalized teeth examined were found infected. In examination of 1,350 devitalized teeth Ulrich found abscess in 83%. Duke reported apical abscess in 81% of devitalized teeth, particularly in such as showed imperfectly or incompletely filled root canals.

The practitioner must be guided by the interpretation and findings of the dental specialist. Even to-day opinions differ as to the significance of areas of osteoporosis or hyperostosis and root absorption. Often a large area of rarefaction will be found sterile. Conversely, a virulent infection may not be shown by X-ray, in the early stages at any rate. For example, in a recent case an X-ray of a devitalized tooth showed no pathology, (8 yrs. after filling). A leucocytosis, with a grave lesion of the optic nerve, with failure to find any other focus led to the extraction of an apparently normal tooth, from the dentinal tubules of which, however, a pure culture of streptococcus haemolyticus was obtained and the eye lesion promptly cleared up.

It is in the treatment of dental focal infection that the utmost co-operation between dentist and physician is called for. In young people with good powers of immunity and reaction, with a not too grave secondary lesion, much can be done by conservative measures, as drainage, sterilization and filling of the root canals, or even apico-ectomy. There is no doubt that many diseased teeth are preserved for want of proper study of the patient as a whole or for the false value of cosmetic indications. If in doubt, or in the debilitated or aged, and in view of the technical difficulties of efficient sterilization of apical infection, extraction is indicated for the sake of safety.

The tonsils are of chief interest in our discussion as Rosenow has shown the elective affinity of streptococci from the tonsils for joint tissue. The bacterial invasion of the tonsils is practically universal. Suspicion will be directed to this area by a history of repeated infection, the associated clinical states, cervical adenitis, the typical bluish-red injection of the pharyngeal ring, their gross appearance but not their size, the character of the secretion expressed from the crypts or peritonsillar fossae and the cultural findings from a smear taken by a specialist from the deep secretion as various streptococci are normally present in the mucosa of the mouth and throat: Identification of the organism is of great value and the case should be clinched by study of the removed tissue. Even though the tonsils have been operated upon the presence of lingual areas, residual tissue or lymphoid regener-

ation in the fossa or pharynx is even more to be suspected. The treatment is always removal, even if in doubt.

The accessory *sinuses* are less often causal but infection of these areas is commoner in children. Specialist investigation is required for such measures as inspection of the sinus orifices, smears and cultures of discharges from sinus affected, transillumination, search for polypi, and for septum deflection or turbinate hypertrophy predisposing to impairment of drainage, to be followed, if necessary, by cultures from swabs left 12-18 hours over the orifice under suspicion, diagnostic puncture, suction and X-ray. A recent article demonstrating the use of lipiodol in the X-ray diagnosis of antrum infection would indicate that this prodecure is of great assistance.

The middle ear and mastoid cells must not be over looked.

In the respiratory tract a history of recent or repeated infections of the bronchi, lungs or pleurae, with the findings on physical examination, sputum tests, and X-ray, (not forgetting the method of bronchial visualization demonstrated here by Dr. Pritchard of Battle Creek), may reveal bronchitis,—ectasis, delayed pneumonic resolution or infected hilar lymph nodes.

The alimentary tract may present frank foci in the gall bladder or appendix or such lesions may only be revealed by painstaking clinical investigation, with such special procedures as the Meltzer-Lyons duodenal drainage, Graham dye test and the van den Bergh test for biliary infection, and by the barium series for an appendicular focus. X-ray may reveal diverticulosis and stasis, both predisposing factors to absorption of septic or toxic products from the bowel. Colitis, anal fissures and rectal phlebitis are readily recognized.

Indicanuria or persistent bacilluria are significant.

Examination of the *stools* for streptococci, entamoebae dysenteriae or histolytica and for products of intestinal ulceration may render assistance.

Lane and his school attach great importance to the alimentary factor in arthritis and quote cures from the very radical operation of colectomy.

The *skin* is regarded as a focus in the presence of wounds, burns, purulent skin lesions, onychia, etc., and minute abrasions may allow vascular or lymphatic invasion of the streptococci so numerous in and on the skin.

Infected *lymph glands* secondary to a primary focus which may have been removed, or in an inaccessible region as hilar or mesenteric areas, present a great problem.

Focal infection in the *urinary tract* will be revealed by appropriate measures—history, symptoms, urinalysis, test for residual urine, and cystoscopy for pyelitis and associated conditions. Treatment will follow on obvious lines. A tubercle search is indicated in the majority, if not all, of pyuria cases.

In the female the *genital* tract may be the site of the focus of infection. The history, with symptoms of discharge, altered menstruation and other evidence of puerperal or gonorrhoeal pelvic infection will demand careful bimanual, speculum and bacteriological examination. Though the commonest, the gonococcus is not alone in producing pelvic pathology. In searching for gonococcal infections the best time is post-menstrual or after a provocative dose of specific vaccine, and the best sites the urethra, Bartholin's glands and the cervix. Great help may be given by the gonorrhoea complement fixation test which will usually be found positive in tubal and often in cervical infections.

Special attention must be directed to latent gonorrhoeal infection in the male. Such a focus is often dismissed after a perfunctory history,

or, at the most, a digital palpation of the prostate.

A history of gonorrhoea, no matter how long before, and even if apparently cured, demands a full and routine examination because most of these cases fail to continue their treatment to a successful termination or are dismissed without a test of cure. Infection may be harbored, without definite clinical signs, for many years. An outstanding example is a case of Dr. Birt's on whom I made a urological survey. This man had two children and a wife who on subsequent examination was considered free from infection. A routine search showed a few inconstant shreds in the urine, a moderately enlarged and slightly tender prostate with an expression of pus, in which gonococci were found. The complement fixation test was strongly positive for gonorrhoea. This was 34 years after infection.

A routine examination in any suspected case will include examination of any urethral secretion, search of the urine for shreds and microscopic examination of the same, passage of bougies, sounds and urethroscope to determine folliculitis or laccunar infection, also palpation of epididymes, seminal vesicles and prostate, with microscopic examination of the expression on massage. Pus is clinically important; finding the gonococcus only more so. A provocative does of g. c.

vaccine is most helpful.

There are, undoubtedly, many cases of prostatitis, acute and chronic, not due to the gonococcus, though in some it was the invader, allowing subsequent implantation of other, mixed, infection which

perpetuates the inflammatory process.

Should the posterior urethra or the adnexa come under suspicion the gonorrhoea complement fixation test will usually settle the diagnosis. This test has proven to be of great value in doubtful cases of chronic infection and as a test of cure.

The treatment of genital focal infection in the female is all too frequently surgical, with resultant impairment or loss of function.

In the male, persistent massage of the prostate, with vaccines, and other adjuvant measures, as rectal irrigations, diathermy, etc., will usually succeed, in time. It is vesiculitis which is the most com-

mon cause of gonorrhoeal arthritis. Treatment through the vas, with massage, etc., may afford relief. In extreme cases the focus must be removed surgically.

It is in the gonorrhoeal types of arthritis that non-specific protein

therapy has met with much success.

Before closing certain conditions which may account, in some measure, for the failures in the treatment of arthritis might be enumerated.

- 1—The focal infection, though the commonest, may not be the only cause. The work along bio-chemical and physiological lines which is now being done, will, it is to be hoped, throw more light on this dark subject.
- 2—An existing area of focal infection may not have been diagnosed, either as a result of too cursory an examination, or in spite of an exhaustive search.
- 3—Other foci than the area or areas found may be still active, and areas of secondary infection, as lymph glands and the joints themselves, may perpetuate the infection.

4—The metabolic and endocrine factors may have been neglected.

- 5—There is a possibility that certain progressive cases are due to a hitherto unidentified infection.
- 6—Apparent failures may only be due to the frequently found period of exacerbation in the joints following removal or treatment of the primary foci.
- 7—Apparent failure may be due to impatience. At least six months should have elapsed before clinical improvement can be despaired of.
- 8—The organic structural changes may have advanced to an irreparable degree.

Regional Anatomy is the title of a text book on Anatomy written by Dr. John Cameron, Professor of Anatomy in Dalhousie University. The first edition appeared in 1920 and was prepared in the incredibly short time of six weeks. The second edition, which has recently come from the press has the advantage of a careful revision, being rewritten largely and remodelled. There is an additional Chapter on "The Chief Conducting Paths of the Brain and Spinal Cord." While the book was originally intended for the Dalhousie students there has been a considerable demand for it from some schools in the United States.

The great epidemic of Typhoid in Montreal was caused by infected milk according to Dr. Harrison of McGill. It is stated that the supply of milk was all from one pasteurizing station, and that the origin of the infected milk has been found.

Nova Scotia Hospital

(Address by Dr. F. E. Lawlor, Supt. N. S., Hospital before the Branch of the Medical Society of Nova Scotia)

THE care and treatment of the insane in the Province of Nova Scotia is a question that should be of interest to the Medical Profession. It is very seldom that a member of the Medical Profession pays a visit to the Nova Scotia Hospital, and I doubt if more than two or three of you gentlemen present have honored the Institution with a visit since the days some of you were compelled to visit the wards as medical students.

I am sorry to say that the method of the care of the insane in this Province, to some extent, is one that was discarded many years ago by modern thinking and acting people. Under the present method we have the Nova Scotia Hospital which is sufficient to admit all acute cases and care for those chronic types who are considered to be unsuitable for treatment in the various county asylums distributed throughout the Province and maintained by the municipal councils. great number of these institutions are no credit to a civilized state. Not many miles from here I only the other day learned of a case where a man, who was transferred from the Nova Scotia Hospital, was prevented from escaping by having an iron ball and chain attached to one of his legs, and we claim to live in a civilized community. There are institutions in this Province which do not have such a thing as a bath tub and a number lack toilet facilities. I will not detain you with stories of this kind as my sole purpose to-night is to plead for the Institution of which I have the honor to be the Medical Superintendent.

The Nova Scotia Hospital has 500 beds which was opened for the admission of patients in 1858. The total number of admissions from that date up to the year ending September 30, 1926 was 8846. Of that number 3597 recovered, 1637 were discharged or transferred to county asylums as relieved, 1057 discharged as unimproved and 2077 died. The percentage of recoveries has been about 40 per cent. During the past year we admitted 227 patients and had a total of 168,166 hospital days, which is more than the total hospital days of the Victoria General and Nova Scotia Sanatorium combined.

When the Institution was constructed no doubt, it was thought that the last thing in mental hospital construction had been accomplished, but that was 68 years ago and, apart from minor improvements and renovations, the buildings are the same and you may readily imagine the difficulties the staff are confronted with when endeavors are made to carry out modern methods in the treatment of the insane. During the past few years many new innovations have been introduced into the treatment of the insane. People are no longer satisfied that custodial care is all that is required. While it will be necessary, always, to provide custodial care for a certain type of mental cases, our efforts should be directed to prevent our acute cases from reaching this stage and, although we cannot hope to abolish the chronic mental case, it is only logical to suppose that we may lessen their numbers if facilities are furnished to deal with the patient early in the disease, and even though we are unable to completely restore him to a normal mental life, we may hope to convert him into a being who may be less burdensome to the state than he now is. What does the Nova Scotia Hospital lack?

A general hospital which does not have an up-to-date laboratory for the examination of urine, blood, excreta, etc., does not have at its command an X-ray department and methods for investigating the working of the internal organs, would, by the general public, be looked upon as something very inferior as compared with a hospital which was so equipped. The Nova Scotia Hospital does not possess these advantages.

Last year 59 general anaesthetics were given for the extraction of teeth. Many of these people to-day have no means of masticating food as they should, as no provision is available for the supplying of artificial teeth. The appointment of a part time dentist would, to a great extent, eliminate this unfortunate condition. How often do our patients claim that they cannot eat, that the food does not digest and that it only causes them distress! Often has this been put down to a delusion. Would you gentlemen, if one of your patients came to you with a complaint of that nature, tell him that there was nothing wrong with him, that he was laboring under a delusion? No, you would have his case fully investigated and reported on by an X-ray expert. But with the poor insane it is a delusion. Why should not the mental case have the same advantage as the patient in the general hospital!

For many years it has been a recognized fact that the treatment of acute excitement by drugs is useless, and to-day all modern mental hospitals are provided with means of treatment by hydrotherapy. The present hydrotherapeutic apparatus at the Nova Scotia Hospital does not fill the bill as it is not reliable or safe to use. Another type of treatment which has been well tried and found to be beneficial is that of vocational therapy. During the period of the war the D. S. C. R. provided vocational instructions, for their patients with beneficial results. Unfortunately they withdrew their workers and to-day no such classes are conducted in our Hospital while in most mental hospitals to-day this is one of the foremost methods of treatment, not only for the promoting of rapid recovery in a certain type of acute cases but it

also lessens the tendency towards mental deterioration in those cases which do not recover.

Some of you may hold the idea that the Province should erect a Psychopathic Hospital and that the Nova Scotia Hospital be used for chronic patients only. The Psychopathic Hospital has not yet proved that it is capable of caring for all types of acute insanity and is, more or less, in the experimental state. The Nova Scotia Hospital requires increased accommodations, an X-Ray department, a laboratory, a modern hydrotherapeutic plant, a vocational department and a dental surgeon. We have a well-organized Training School, second to no mental hospital in Canada, and I feel that if the Nova Scotia Hospital was brought up to the standard of a modern general hospital the unfortunate mental patient would then receive the treatment and care which he is just as much entitled to as the man who suffers from tuberculosis, syphilis or some other medical or surgical disease.

The Nova Scotia Hospital has helped mankind in the past years and I trust that you gentlemen will help her to spread out and do

greater work in the future.

Lord Chief Justice Moore of London, Eng., has ruled that a doctor is not entitled to charge a wealthy man more than a poor one. But Secretary Cox of the British Medical Association said: "That is all wrong. I cannot see the heart of the public bleeding for a millionaire who must pay big fees so the poor may receive the highest medical skill at small cost."

The Senate of Vermont State has passed a Bill providing for eugenic sterilization. It is noted, however, that this can only be done with the consent of the subject.

It has been stated that in a shipment of 53 hogs from a certain district of Nova Scotia to Moncton, N. B., 13 were found to be tubercular. This is undoubtedly due to the dairy by-products fed and is a strong argument in favor of a restricted area.

Dr. Wilfrid Grenfell, who has been working in Labrador since 1892, recently made a lecturing tour over Nova Scotia, subject, "Midst Ice and Snow in Labrador." At present in Labrador there are six hospitals, four nursing stations, two orphanages, several schools and a well-equipped hospital steamer, with its tending power boat. The medical profession may well be proud of the marvellous work accomplished by Dr. Grenfell.

The Moncton Conference

Why and How Called and Conducted.

A CONFERENCE of medical representatives from the three Maritime Provinces was held in Moncton, N. B., March 24th. and 25th. In the May issue of the Bulletin we hope to publish the full minutes of the meeting, but in the meantime something may be said of its objects and how it was called, as far as Nova Scotia is concerned.

Early in December Dr. Routley, General Secretary of the Canadian Medical Association, after paying a visit to Charlottetown and Saint John, wrote the Secretaries of the three provincial societies, the letter

being summarized, as follows:-

It occurred to me, when visiting the profession in two centres in the Maritimes, that a medical conference of the three provinces would be of value both to them and the C. M. A. The men of P. E. I. at once approved and at once named their delegates. The N. B. Executive also approved. Immediately I wrote the Secretary of the N. S. Society asking for consideration of the proposition. I think your Executive will be interested in knowing that a somewhat similar conference was held in Winnipeg, just three years ago now, by the four Western Provinces. This offered an opportunity to discuss a great many problems of mutual interest. The result has been that, during the past three years, the co-operation that has existed between the four provinces has been much appreciated by all.

As a partial agenda for the proposed conference I think of the following:—(To avoid repetition the agenda actually followed out is

here given.)

- 1. Selection of Chairman and Secretary.
- 2. Roll Call.
- 3. Extra Mural Post Graduate Plans.
- 4. Provincial Interchange of Speakers.
- 5. Medical Organization.
- 6. Provincial Meeting Dates.
- 7. Periodic Health Examinations.
- 8. Workmen's Compensation Problems.
- 9. Medical Legislation.
- 10. C. M. A. Annual Meetings.
- 11. Zoning of the C. M. A. with Maritime Division.
- The introduction of new items and the rearrangement of the agenda in any manner in which the conference may decide.

It would, of course, be my intention to be present and to assist the conference with any information I may have of general medical conditions in Canada. I would express the hope that the President-Elect of the C. M. A., Dr. F. N. G. Starr and the President of the Council, Dr. A. Primrose, might also attend. Would you please take this matter up with your Executive as soon as possible.

In conclusion let me say that, although such a three-cornered conference would have no powers to commit the respective provinces, yet I feel that the meeting should be productive of many useful ideas, and would have only one tendency, namely, to promote and support

the many things in which the profession is interested.

Upon passing this communication to the President it was decided to circularize the members of the Executive to obtain their opinions. A copy of this same letter, with an explanatory one from the Acting Secretary, enclosing a questionaire and a stamped and addressed envelope, was then sent to each member of the Executive.

The questionaire was as follows:-

 Do you approve of such a conference being held at Moncton along the general lines set forth by Dr. Routley and at the time stated.

2. How many should constitute the Nova Scotia delegation?

3. Should the Provincial Medical Society pay their travelling expenses.

4. Have you any nominations to make for delegates?

- 5. Will you empower the President to take the necessary action indicated by this written vote?
- 6. Have you any remarkst o make regarding a consideration of topics other than those mentioned? Please.

The result of the voting is thus summarized:—

Number of members questioned
Replies received
Answering "Yes" to all questions
Answering "No" to all questions

There were, naturally, some variations in answering questions as to number of delegates, personel and topics to be considered. Two suggested the delegates pay their own way. The above shows, however,

that the Executive gave the matter full consideration.

The President then made the following appointments:—Dr. J. J. Roy, Sydney, President; Dr. L. R. Morse, Laurencetown, 1st. Vice-President; Dr. G. H. Murphy, Editor of the Bulletin; Dr. S. L. Walker, A/S Dr. Ross Millar, Amherst. When the time came to attend the meeting Dr. Murphy was unable to leave his hospital duties owing to the absence of other surgeons. Then it was learned, for the first time, that Dr. Millar, instead of going to California only, kept right on going, on his way around the world, being in Japan when last heard from. Thus only three delegates from Nova Scotia were present.

When the meeting was called to order in the Brunswick Hotel Thursday, March 24th. at 2.30 P. M., the Roll Call showed the following delegates:—P. E. I.—Doctors Jenkins, Yeo and McNeil; N. B.—Doctors Curran, Veniot, Nugent and McKenzie; N. S.—Doctors Roy, Morse and Walker. Representing the C. M. A. were Dr. F. N. G. Starr, Dr. A. Primrose and Dr. T. C. Routley. Others present at some or all of the sessions were, Doctors Wodehouse, Miller, Sieniewicz, Campbell, P. S., Calder, Kirby, Wherrett, Gass and some other local men. The conference then elected Dr. Curran of Saint John, Chairman and Dr. Yeo of Charlottetown, Secretary. Work was immediately started on the agenda already given.

At 6.30 P. M. adjournment was made to attend a banquet given by the Gyro Club to which the visiting doctors were invited. Over 100 were present and the Mayor officially welcomed the visitors. The menu was excellent, the music, both choruses and solos, most pleasing, and, best of all, the speeches were witty, crisp, clever, instructive and short. These included splendid addresses from the Toronto representatives. All the speeches were broadcasted.

At 9.00 P. M. the conference resumed its sitting, not adjourning until 12 P. M. On Friday, the 25th., a session was held from 9.30 A. M. until 12 noon, when final adjournment took place.

Prior to the opening of the conference the Nova Scotia delegates felt somewhat in the dark, as to what was expected to be accomplished and just what spirit would prevail. Were there any special motives behind the calling of the conference? We had not been at work half an hour before we discovered there were two very definite motives in the minds of the C. M. A. representatives. The first was, in what way could the C. M. A. best assist the profession in the Maritimes. The second was to get the view-point of the Maritimes on their own problems and the opinion of the Maritimes on C. M. A. matters of concern to the Dominion at large. Thus, almost at once, a spirit of concord and co-operation developed that made the conference one of the best ever held. This opinion was universally expressed, especially by the C. M. A. representatives.

S. L. W.

International Clinics Vol. 1, 37th. Series, 1927 has come to hand and is as interesting as usual. Diabetes Mellitus, Daithermy, and some aspects of cardio-vascular disease are subjects of the leading articles in Medicine. In Surgery two important Clinics are reported. Dr. Lewis of Johns Hopkins Hospital and Dr. Sauerbruck of Munich. The clinic of the latter was on Thorocoplasty. A foot note states the Professor has recently performed the operation in remarkably quick time. After the patient had been anaesthetized a complete operation, removing sections from the firs to the eleventh rib, but 18 minutes elapsed till the patient was ready to be removed from the operating room. The Editor of the Clinics, Dr. H. W. Cattell of Philadelphia, reviews the progress of Medicine for 1926 the perusal of which will well repay the reader.

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VOL. VI.

APRIL 1927

No. 4

Mens Sana in Corpore Sano—?

"Canst thou not minister to a mind diseased,
Pluck out from the memory a rooted sorrow,—
Raze out the written troubles of the brain,
And with some sweet oblivious antidote
Cleanse the stuffed bosom of the perilous stuff
Which weighs upon the heart?"

ONE wonders if some sorrow-laden soul, viewing the whole distressing problem of mental diseases in this Province, might not appropriately today turn to the medical profession and make the same taunting, beseeching, heartrending appeal that the master dramatist put into the mouth of Macbeth. On a scientific basis, have we really gone very far? Have the two great agencies of modern medicine, namely, clinical and laboratory research wrestled with the problems of insanity to the same extent as with other diseases? How much more does the average graduate of 1927 know about insanity than his predecessor of twenty-five years ago? Or is there anything more to learn than there was then?

We think we should not attempt to answer these questions. By doing so, we should surely display a large ignorance of the subject we are placing before our readers; and it would not help us in our primary object, which is, to direct the best thought of our profession to the problems connected with the treatment and care of the insane and the feeble minded. We have a smug complacency of our powers

of dealing with all manners of surgical and medical problems; and the public has come forward with well equipped hospitals, wherein the scientist and the craftsman may combine and apply what the modern world of medicine offers in the diagnosis of disease and its care and treatment. We have learned to think in terms of operations and sera and drugs and hospital days, etc., and perhaps many of us have been so wrapped up with the interests of our own department, that we have forgotten that unfortunately large class of persons suffering from acute and chronic mental disease. Essentially, their mental deformities have as great a claim on the resources of our science, as have other diseased organs on the surgeon and physician. It may be said that so little can be done in the treatment of the insane, as compared to other diseases. The more limited our scientific resources, the more necessity for intensive application of what we have; and we have it on the authority of the Superintendent of the Nova Scotia Hospital that the equipment at this institution is woefully inadequate to meet the need of modern methods of treatment of the insane. The fact that 40% of admissions to the Nova Scotia Hospital, since its opening in 1858, were cured, may come as a surprise to many. It seems a good record, and it is only part, for many others were improved so as to increase their citizenship value, and thus lighten their burden on the Province.

The BULLETIN is convinced that there is much in Dr. Lawler's complaint, in his paper before the Halifax Medical Society, that little interest and sympathy are shown by the profession as a whole, for the problems and worries of them that have to do with the care and treatment of the insane. It seems a rather lonesome job. The rest of us have our clinical societies, our laboratory associations, our extramural lectures, and our conventions. In one way and another we are in constant touch with each other, to our mutual advantage, the good of our patients, and the higher efficiency of our hospitals. If an organized profession is to fulfil one of its fundamental functions, it should take cognizance of just such a matter as this. There are more ways than one. Doctors in touch with the County institutions, can often make their work the subject of a paper, or an address, at their Branch Societies. Occasional visits to the Nova Scotia Hospital, something its Superintendent is most desirous of, will go a long way towards familiarizing our medical men with the good and the bad of this institution. Exact knowledge of its needs will breed co-operation, which in turn will develop that public support so essential to the well being of a hospital supported by the taxpayer. In these days of financial stress, no well balanced government department is justified in spending extra money, even on a hospital, unless there be the utmost warrant for the expenditure. The co-operation of his medical confreres throughout the Province, should go a long way in support of the recommendations already made to the Government by the Superintendent.

We feel, too, that the whole dismal picture of the feeble minded in Nova Scotia, is one which primarily concerns the medical profession. No other body of persons are so well qualified by education and experience. The mental background of a sound, medical education, makes the best settings for any additions or specializations which may come from the realm of psychology. If there were more real knowledge of human metabolism, of clinical pathology, of the wide range of the numerous infections, we should begin to hear less of the worst, at least, of the fantastic Freudian stuff, which is so often handed to the multitude for consumption, with the recommendation that this, indeed, is science. Lingering long enough in the shadowy zone in order to observe where pathology ends and psychology begins, would seem to be a necessary function for him who would essay the most difficult of all tasks, that of appraising the normalities and vagaries of the The general practitioner often knocks down a very elaborate and highly differentiated psycho-Freudo-sex-complex structure by curing his patient with well regulated doses of castor oil. While the psycho-analyst is fishing for the toxines which lie buried so deeply in the sub-conscious, the practitioner concerns himself with the alimentary tract. There is no desire to undervalue the importance of the former as a part of medicine, but we think it should be linked securely with physical diagnosis and therapeutics.

The time seems opportune to ask our profession for increased interest in all the matters outlined. The Report recently issued by the government, of the Commission appointed to enquire into the problem of the feeble minded, containing as it does Dr. Hinck's keen analyses of conditions, should, we think, be read by every practitioner

in the Province.

G. H. M.

Mrs. Carney rushed into her living room. "Oh, Walter," she cried as she panted for breath, "I dropped my diamond ring off my finger and I can't find it anywhere."

"It's all right, Olive," said Walter: "I came across it in my trousers

pocket."

While the medical profession all over Canada has been dissatisfied with nearly all the provincial Prohibition Acts the New Brunswick medical men are not altogether satisfied with the proposed Government Control liquor legislation recently adopted. The medical profession should be granted some discretion in the matter of prescriptions and should be disassociated from the sale of liquor under the new measure.

CORRESPONDENCE

Walker, Siskiyou Co. California, U. S. A. March 7, 1927.

Dr. S. L. Walker, 187 Hollis St., Halifax, N. S.

Dear Sir:

Having received from Dr. Jost, the Provincial Health Officer, the circulars bearing on the Nova Scotia Tuberculosis Commission's work, I am glad to know how much is being done to free the country from the "White Plague". Certainly this work is likely to be more efficiently done in a public than a private way, because of the lack of resource, knowledge and power with which any private trust could undertake it. By its very terms, a public interest intrusted to a body chartered by the state, in the nature of things, is one which the people at large have a right to know how it is being carried out, and is therefore much more likely to be efficiently managed than would be any private trust. It would seem then that all that is required on the part of myself and my wife is to leave the trust to be administered after our decease whereby may be dispensed to the poor the needed treatment.

Now as there is already the Dominion Institution at Kentville, and Annapolis County was the place of my Father's longest life work I might suggest Wilmot Springs, under the North Mountain, not far from Middleton, as a fitting place for a Western Counties sanitarium. I remember of him once speaking of it as climatically well suited for this.

If this suggestion, of which I will write also to Dr. Jost, meets the approval of the Tuberculosis Commission, I shall be glad to make such arrangements as seem best adapted to this end, the giving of treatment to people who, because of poverty and ignorance, fail to take advantage of the benefits of medical science. Wherever located for the Western Counties, I assume the government is sure to have such a plant, I should like the Trust to be a Memorial to my Father, and should therefore wish only the income to be devoted to this special beneficence.

Trusting I have made this matter plain, I am,

Yours truly,

To the Editor:-

The thought which the practitioners of the Province are giving to Tuberculosis control, as evidenced by the very interesting letter of "Country Practitioner" in the March Bulletin, is the very best augury that what we believe to be the timely movement being made by the Tuberculosis Commission will merit and obtain the support of the profession of the Province.

"Country Practitioner" intimates that his thought on the matter indicates what might be called seven lines of endeavor, which might

be summarized as follows:-

(1) Examination of contacts

(2) More treatment facilities, or quarantine for hopeless cases. (3) Opportunities for training medical practitioners at Kentville.

(4) Earlier diagnosis.

(5) The preparation of literature for distribution to the medical practitioners, this literature to deal with the treatment of accidents and emergencies of Tuberculosis.

Making treatment available at less cost.

(7) Making arrangements to assist pecuniarly the practitioner, on whom the bulk of the work of treatment must fall.

At least all the above have been under consideration by the Commission.

(1) Contacts of open cases and undernourished children in our schools are those who will probably become definitely tuberculous a few years hence. The Commission wishes to have these examined, and will do everything possible to meet those whom the practitioner will recommend for such examination.

While the value of the cabins or tents referred to by "Country Practitioner" may be considered debatable, it is not debatable that the Province needs at least 300 more beds for tuberculous patients. It is gratifying to know that arrangements now being made will probably supply 50 or 60 beds to the treat-

ment facilities of the Province.

(3) It has been by no means proven that the fact, that many cases of Tuberculosis are far advanced when first examined by the practitioner, can wholly be attributed to him. He examines the case when it presents itself for treatment. However, no one suffers from having gained additional knowledge, and the place where additional knowledge concerning Tuberculosis can best be gained is the Sanatorium. But the public need education also.

(4) Instead of one, there are now two Tuberculosis Examiners on duty, so that more frequent and more regular clinics can

now be held.

(5) Here again additional knowledge concerning all aspects of the disease is of value to the practitioner, the patient and the public.

(6) The funds which the Commission can secure are to be used in making treatment more available for the patient, either actually needy or ill able to bear the cost of a prolonged period of sickness. In fact, they can be expended in no other way.

(7) The representatives of the Medical Society on the Commission will, I feel sure, give the most careful consideration to the interests of the profession here involved. Payment by the Government may not be feasible or advisable, but any effort made to lighten a burden unduly oppressive on the practitioner has everything to commend it.

May I call attention to several other points, which, I believe, might well be stressed. In the first place, the examiners of the Commissions have no means of seeing cases of Tuberculosis, except as these cases are referred to them by the practitioner. They only examine cases referred to them by practitioners. Secondly, the Commission deserves that the profession thoroughly appreciates the fact that all funds received by the Commission from the public can be spent only for the assistance of patients suffering from the disease. All the salaries and overhead expenses of the Commission are being paid from Governmental funds or from monies placed at the disposal of the Canadian Tuberculosis Association for the purpose.

Yours sincerely,

A. C. Jost.

Halifax, N. S., April 4, 1927. Executive Officer, Nova Scotia Tuberculosis Commission.

A True Story.

A little humor is sometimes made in Yarmouth County. This incident occurred during the World War and has only now come to the surface. A doctor was called into the country three miles to see a patient while the roads were bad, so he was obliged to make the call with horse and buggy. On leaving he was paid \$3.00 for the call. Just as the doctor was about to start for home he said, "Oh, by the way, have you any good potatoes? Mrs. B. asked me to get a bushel of good potatoes." "Yes," replied Mr. O., I can let you have some good potatoes." "All right," replied the M. D., "put a bushel in the back of the buggy". In a few minutes the potatoes were placed in the buggy. "How much", said the doctor. "Well Doctor", replied Mr. D. laughingly, "I shall have to charge you three dollars". "What, three dollars?" "Yes, three dollars, but you don't have to take them, doctor, I can get that anywhere". The medico turned red and scratched his head and said, "Well, I'll be damned. Here is your three dollars, but damn your soul if you ever tell anyone that I made a call to your house for a bushel of potatoes I'll smash your phizog."

C. A. W.

REMINISCENCES

Walker, Siskiyou Co., California, U. S. A., March 7, 1927.

Dr. S. L. Walker, Secy. of the Medical Society of Nova Scotia, 187 Hollis St., Halifax, N. S.

My dear Sir:

As suggested, I send you the following reminiscent notes of my Father's experiences. Tho not very pertinent to medical matters, their publication is left to your discretion. The son of a Scotch Presbyterian minister, my father went to Edinburg University for his medical education, graduating there *cir*. 1825, after which he took a postgraduate course at the Royal Infirmary at Glasgow. Upon returning to Nova Scotia *cir*. 1827, he practised for a short time in Halifax, then for some years in Cornwallis, Kings County, where he had grown up, and then at Bridgetown, Annapolis County *cir*. 1840-1870.

Being but eleven years of age at the time of my Father's death in Bridgetown in 1871, I am not able to give much information concerning medical practice then, tho I know the out-of-town calls were often hard and trying work. There being no telephones then, farmers were averse to taking daylight to go for the doctor, because it interfered with what seemed to them more important matters, so messengers came usually at night. The inconvenience of a cold and wet drive to the doctor, and his loss of rest, was as little regarded as was what is the commonest sanitary knowledge of to-day. Wells subject to contamination which common sense and a little work might have remedied, continued to be used.

Yet the medical man should not complain, for of the two professions, in comparison with the cure of souls, the healer of the body seems more sought after and generally more willingly recompensed. Tho one incident to the contrary stands out in memory as a striking example of ingratitude. My Father had ministered to the family of man on the Bay Shore, a long drive and a trying series of visits. Being unable to meet his indebtedness at the time, he gave a note for the same. The matter was not pressed by my Father, but after his death when the estate was being settled, some small payment was made upon it and a receipt given for this. After the lapse of a year or more, in response to a dun, this man paid a visit to my Mother, who was then living in Cornwallis, assuring her that the bill had been fully paid at the time of the payment mentioned above, but that he had lost his pocket book with the receipt while watering his horse. Evi-

dently with the view to corroborate his statement, he called me to pilot him to the spot, when in very short order as it seemed, the lost purse was found; with a few trust of his stick the leather pouch was brought to light as he declared,—"Just where I knew I dropped it." When opened, there indeed was the precious paper, tho so damp and discolored as to be barely legible, and for company a few coppers. "There", he said exultantly, "Now let them bring their old suit, if they wish." But brought it was and the debt was paid because the signature attached could not be proved genuine.

This shady picture of human nature may, in measure, be excused when it is remembered that many of the first settlers in Annapolis and Kings came from the State reputed to be the home of wooden nut-

meg sellers.

That it may be somewhat neutralized, let me add this anecdote told of my Grandfather's experience. A prosperous Cornwallis farmer, ambitious for his son's education, arranged with the parson to tutor him in Latin and Greek. But the lad was so slow of mind that little advance was possible. When, after a time, the father inquired how his son progressed, was told,—"Very poorly." His vocabulary being somewhat vague, in striving to recall the word, "inure", he replied,—"Well then, you must 'manure' him to it!" "Alas. Alas!" said the old man,—"That would take more 'manure' than all that is in my barn-yard and yours."

Very truly,

J. E. Forsyth.

Note:—The father of Rev. Mr. Forsyth was the Dr. Forsyth of which the late Dr. George deWitt in the February, 1924, Bulletin wrote as follows:—

"Dr. Forsyth of Bridgetown was in my youthful days our family physician. He was born in the County of Kings, and graduated in medicine at the University of Edinburgh. For a few years he practised in Cornwallis, and freely used the lancet in the performance of phlebotomy, so freely it is said, that a patient while undergoing the process suddenly collapsed and passed away. The Doctor on leaving the house walked unconsciously past his horse, where he had left the animal hitched to a post, and continued walking for half a mile, before he realized that his engrossing thoughts upon his ill luck with his patient, had put the thought of his horse out of his mind. Dr. Forsyth came to Bridgetown about 1856,—the veins in the arms of his patients were left undisturbed. At the age of forty three years my father was attacked with typhoid fever. The Doctor would race daily from his office to our house administering calomel one day and opium the next."

Medical Society Notes

Halifax Branch.

THE seventh regular meeting of the Society for the season 1926-27, was held at the Dalhousie Health Clinic, on January 19th. 1927. The meeting was called to order at 8.30 P. M., the President in the

chair. Twenty two members and two students were present.

The paper of the evening was given by Dr. Babkin of the Medical College staff on "The Endogenous and Exogenous Chemical Stimuli of the Motility of the Alimentary Canal". While the paper was, as expected, a valuable one from the scientific standpoint, it, and the subsequent discussion, brought out many points of clinical interest, which is, of course, of the greatest value to the ordinary medical society. The paper was discussed by Doctors Murphy, D. J. McKenzie, K. A. McKenzie, Johnston and Smith.

The eighth regular meeting of the Society was held on February 2nd. at the Childrens' Hospital. Twenty members were present, the President in the chair. On motion the Executive was instructed to name three additional members to the Provincial Executive. (Subsequently the President and First and Second Vice Presidents, Doctors Weatherbe, Murphy and Johnston, were named.) Dr. G. G. Gandier, of Dartmouth, was elected to membership.

Dr. Weatherbe presented a case of specific disease of the bones in a child who had no other evidence of hereditary syphilis. He also showed a case of multiple fractures in a little girl with typical sabre like deformity. Two cases of club feet under treatment were exhibited. He also demonstrated a case of Potts' Disease of the Thoracic spine,

with the apparatus used to correct the deformity.

A case of a tumor of the chest wall, attached to the ribs, causing marked Scoliosis, was demonstrated with X-Ray plates. The tumor

was removed by operation.

Dr. T. B. Acker showed a series of cases.—(1) T. B. Hip; (2) Double Congenital Dislocation of the Hip; (3) Unilateral Dislocation of the Hip in an older child; (4) A case of Anterior Poliomyelitis with paralysis greatly improved by operation.

Dr. Graham demonstrated a case of muscular distrophy.

Refreshments were provided by the staff of the hospital for which the Society extended thanks.

The ninth regular meeting of the Society was held at the Dalhousie Health Clinic on February 16th. 1927. Fourteen members were present. The paper of the evening, which was much enjoyed, was presented by Dr. R. E. Mathers on "Ordinary Ulcers and Non-Penetrating Wounds of the Cornea". This is of such interest to the general practitioner that it will be published in an early number of the Bulletin. The paper was discussed by Doctors McLennan, Schwartz and McLarren.

Hygenic Wedding

I publish the intentions of union between these conglomerations of tissues, Hygiene and Sanitation.

If any of the here present combinations of "nucleated masses of protoplasm of microscopic size", know cause or just impediment, why these two should not unite, ye are to declare it.

This is the third time of asking.

Dearly beloved masses of protoplasm of squamous type, we are aggregated anterior to Gregory to anastomose Hygiene and Sanitation. Prognosis is favorable in the professional optics upon us.

To this superior estate, science infiltrates and, therefore, is *not* by any conglomeration of tissues to be penetrated subcutaneously, superficially or externally; But these obdurate membranes persist in interlacing.

Sanitation, wilt thou take Hygiene to be thy complement to articulate? Wilt thou be a tendon of her, wilt thou operate and experiment upon her in sickness and in health and, forsaking all others, keep all malignant foramini from between you?

(Answer) I will.

Hygiene, wilt thou take Sanitation to be thy complement to articulate?

Wilt thou be as a leucocyte to him, protecting him from all harmful bacteria by direct injection and bacterioulosis?

(Answer(I will.

Who giveth Hygiene to be married?

(Answer) I, Eugenics.

(Repeat after me).

I, Sanitation, take thee, Hygiene, to be my wedded complement, to bind and to bandage from this day forward, for inferior or for superior, for longer or for shorter, whether you flunk Anatomy or not, I pledge you my troth.

I, Hygiene, take thee Sanitation according to the same prescriptions.

With this sterile ring (slipped down the shaft metacarpal extremity of the third phalanx belonging to the fourth palmar digit) I thee endow with all my bones and the knowledge assimilated from Gray.

What Health hath joined together, let no bacteria katabolize.

I declare thee a synarthrosis.

Oliver Wendell Holmes.

(Montreal Gazette.)

To grow old gracefully has been described as the master work of wisdom—and one of the most difficult chapters in the great art of living. It has not been too difficult for Mr. Justice Oliver Wendell Holmes, of the United States Supreme Court, who on Tuesday last celebrated his eight-sixth birthday by walking from his Washington residence to the Capitol, a distance of about two miles, and there accomplished his daily round, but by no means trivial task of listening to legal arguments. Interest in the event extends beyond the circle of Justice Holmes' immediate friends, for there are many thousands of people in the English speaking world who, though they may not know the Judge, feel they know intimately his father, whose sparkling wit and flowing humor are evident to the most casual reader of the Autocrat of the Breakfast Table. These and other qualities give the Autocrat a place among the great writers of America and have made the name Oliver Wendell Holmes familiar as household words. Every time Mr. Justice Holmes has a birthday the story is revived that he is about to retire from the Bench, and politicians speculate as to his successor. So far as known, however, the idea has not suggested itself to the Judge. At 86, he is said to be "still active as "a youth". He works hard and walks miles every day. In these two facts, perhaps, may be discovered part of the secret of longevity.

Asked to pray for warm weather so that her grandma's rheumatism might pass away, a five-year-old girl knelt and said:

"Oh, Lord, make it hot for grandma."

This is an Editorial note from the April C. M. A. Journal. Please note the heading!—we are now called a Journal:—

CANADIAN JOURNALS

The February number of the *Nova Scotia Medical Bulletin* opens with some well written reminiscences of Yarmouth doctors of the "70's" by Dr. C. A. Webster of Yarmouth. There is a distinct historical value in reminiscences of this nature, for the medical man of the type they recall is passing fast, and records of them by contemporaries are needed. In consonance with this idea is the announcement in the same "Bulletin" of a gift to the Medical Faculty of Dalhousie Univerity of a number of old surgical instruments by the late Dr. Augustus Robinson of Annapolis Royal. It is hoped that these will be a nucleus for the formation of a medical historical museum in the University.

We note also that the authorities in Dalhousie University have arranged to place the electrocardiograph of the Physiological Department at the disposal of those physicians desirous of using it. Cardiograms will be made by Professor Dryer of the University. An arrangement of this nature would seem to be an eminently useful one.

Department of Public Health.

For the information of the doctors in Nova Scotia the following is what the N. S. correspondent to the C. M. A. Journal has to say

regarding the last annual report of the Department:

In Nova Scotia the inspection of the humane and the penalinstitutions is a function of the Department of the Public Health, and to every session of the legislature the Provincial Health Officer makes separate reports on health, and on each of these types of institutions. The reports which Dr. Jost has presented of the experience of the year ended September 30th last are, as in the past, of much interest to the profession. In that which deals with the penal institutions, he presents tables showing ages of those admitted to the several gaols and the numbers of repeaters. This marks the beginning of a study of age in relation to recidivism. He points out that "it is as irrational to attempt the moral regeneration of a criminal without an accurate record concerning his antecedents as it would be to attempt to ameliorate his physical ailments without knowledge of the incidents leading up to the condition for which he seeks relief." He again calls attention to the inadequacy of the present system, which has little tendency to prevent recidivism, and recommends consideration of a more rational method of dealing with offenders against the law. In his report upon humane institutions, which provided care for 17,465 persons during the year, Dr. Jost comments favourably upon the general and special hospitals, but states that several of the local asylums are still far from creditable. Admissions to the hospitals show a considerable increase as compared with the previous year, but the reverse applies to the local asylums. The report on health and vital statistics shows gratifying improvement over all previous years in the infant mortality rate, which was 67.5. There was a small increase, compared with 1925, in the number of births. The general death rate, however, went up a little, while the tuberculosis rate remained practically as for 1925. The pneumonia death rate was unusually high, and there was a sharp rise in influenza deaths. Diphtheria, scarlet fever and typhoid fever combined accounted for only 41 deaths. Reference is made to the successful inauguration of special antituberculosis work, to re:organization of the public health laboratory, to better reporting of infectious conditions, to increased attendance at the various health clinics, and to more extensive educational work. An extended laboratory study of the relative merits of the Wassermann and Kahn tests is in progress.

A Hom'let Come to Judgment.

A physician who was so well acquainted with the editor of a medical journal that he felt free to express his mind, ended up the discussion over the rejected article by saying with some heat:

"Well, Phil, I suppose I am foolish to try to get you to appreciate the merits of this article; you never wrote an article yourself, so you

do not know anything about it."

"No," retorted Phil, "and I never laid an egg, but I am a better judge of an omelet than any hen in the state."

"What's the fuss in the schoolyard, sonny?" asked a gentleman passing a school.

"Why, the doctor's just been around examinin' us, an' one of the

deficient boys is knockin' hell out of a perfect kid."

The Northern part of Colchester County, and Cumberland and Pictou as well, seems to be conducive to longevity. There died recently, at Earltown, Mrs. Margaret MacKenzie, aged 102 years.

Recent additions to the Exchange list of the *Bulletin* include The Library, American College of Surgeons; The Library, Dalhousie Medical College; The Library, St. Michael's Hospital, Toronto; The Library of the Medical Society of the County of Kings, Brooklyn-New York.

In all probability the next important address on the heart will be illustrated by the latest invention, the Electric Stethescope, which magnifies the heart sounds very many times, everyone in the room will be able to hear the sounds as plainly as if he were examining the patient himself.

Of course, it's an old story, but old stories as we've found, are great producers of laughter. So now you can read about what happened to a tramp who knocked at the kitchen door of a Portland home one day, where he was greeted by a smiling Chinaman.

" 'Say, John,' croaked the tramp, 'give me a hand-out, for the

love o' Mike, will yer? S'elp me, I'm starvin'.

"'Like fish?' inquired the Chinaman with a bland smile.
"'Betcha sweet life I like fish,' said the tramp eagerly.

"' 'Call Fliday,' said the Chinaman, and still smiling blandly, he shut the door."

OBITUARY

PERCY CHURCHILL WOODWORTH, M. D., C. M., Dal. Univ., 1892, Kentville, N. S.

On March 25th, at the Victoria General Hospital, Dr. P. C. Woodworth of Kentville, passed away after but a few days acute illness, although he had been in indifferent health for some time. As noted above he was a graduate of Dalhousie in 1892.

He was born in Canning 60 years ago and was the son of the late D. B. Woodworth, a man who figured largely in the very strenuous political fights that were characteristic of Kings County in the 80's and 90's, perhaps the most notable being that in which he was defeated by Dr. F. W. Borden of Canning. Dr. Woodworth's mother was Miss Churchill, a member of the famous ship-building firm of Hantsport.

He attended school in Kentville and graduated from Horton Academy in 1886, when he began the study of medicine. After a year his restless disposition led him to join an Arctic Expedition, exploring chiefly Hudson Bay. He was a very valuable and active member of that expedition. After a year he resumed his medical course, and practised continuously in Kentville till two months previous to his death. While in college, and even later, he was a great football player and a fancy and speed skater of note, at the world's championship in Montreal in 1890 taking second place.

Dr. Woodworth was twice married, his first wife being Miss Carrie O'Key of Port Williams, a lady of high musical attainments. A daughter of this marriage is now in Paris studying music, living with her aunt Madame Labori, wife of the famous French lawyer who defended Dreyfus. A son, Geoffrey, served in the war from 1914-1918 and afterwards joined the U. S. navy. He was accidentally killed at Vera Cruz a few years ago. His second wife was Mrs. Percy Bishop of Kentville, who survives him.

Dr. Woodworth had very considerable professional ability, standing high in the estimation of the local practitioners and of his patients. Anyone who can practise in one place for thirty-five years must have the confidence of the community. He was a member of the Valley Medical Society and attended many of its meetings. During his life he was an ardent temperance worker and, in spite of the permissions of the N. S. T. Act, it is said that he never issued a prescription for the use of liquor. A man of strong political convictions, like his father, he supported the Conservative party. Except his wife and the daughter mentioned he has but one relative surviving, Mr. A. A. Woodworth of Kentville, a cousin.

The funeral took place March 27th. from St. James (Anglican) Church, which was filled with those who desired to pay this last tribute of respect. The burial was at the "Oakes" cemetery.

S. L. W.

Mrs. Clara Payson Rice passed away at the residence of her daughter, Dr. Grace Rice, 11 Spring Garden Road, on March 23rd. Mrs. Rice had a charm of manner that made for her a host of friends, who will lose a good counsellor, an intellectual companion and an intimate friend. Two daughters survive, Dr. Grace and Miss Frances, R. N., of Halifax. Interment took place at her former home, Weymouth, N. S., March 25th. The daughters have the sympathy of the profession in their bereavement.

The death of Colin McIsaac, of Antigonish, recalls the fact that he lost a son at the time of the great raid on No. 1 Canadian General Hospital, Etaples. Dr. Fielding McIsaac had only completed his course in medicine at McGill a few months before this raid took such sad toll.

The entire medical profession in Nova Scotia regretted to learn of the death on March 24th, of Mrs. Buckley, wife of Dr. Geo. E. Buckley, of Guysboro. The deceased was a sister of the late wife of Dr. A. F. Buckley of Halifax. For many years she was actively identified with the Sunday school and other organizations of the Methodist Church. During the war she was President of the local Red Cross and every movement for the betterment of the community always found in her active support. To Dr. Buckley, Honorary member of the Medical Society of Nova Scotia, the Bulletin and all members of the profession extend their sincere sympathy.

PERSONALS

DR. A. A. Deckman and Mrs. Deckman of Bridgetown spent 10 days recently in Halifax visiting Mrs. Deckman's brother, Mr. Burns.

The wedding at an early date is announced of Dr. Ross Cameron of Halifax, but now practising in Alabama, to Miss Nettie McKenzie of Nine Mile River. Both are graduates of Dalhousie, Miss McKenzie in Arts.

Dr. O. B. Keddy of Windsor, spent the last two weeks of March in a trip to Boston and New York.

Dr. A. C. Gouthro, Dalhousie 1925, of Little Bras d'Or, has gone to Johns Hopkins for post graduate work.

Dr. A. L. Wilkie, McGill 1923, has been awarded a scholarship in surgery at the University of Edinburgh. He is a son of Mr. C. N. Wilkie of Antigonish. He was a graduate of St. Francis Xavier and was overseas with that unit.

Dr. and Mrs. F. S. Messenger of Middleton, left March 25th. for several weeks trip to Boston, New York and other cities.

The case of Burris vs Town of Dartmouth will be appealed to the Supreme Court. The suit arose from the collision of Dr. Burris with a town fire truck.

Dr. F. E. Lawlor of Dartmouth, was elected Vice-President of the newly organized Halifax Fish and Game Protection Association. On the same evening Dr. M. A. B. Smith of Dartmouth, was elected President of St. George's Society.

Dr. A. R. Campbell of Yarmouth, was recently called to New York owing to the serious illness of his brother-in-law.

Dr. R. F. McLatchey, Dalhousie 1926, of Halifax, has gone to London, Eng., where he will enter into partnership with his brother.

The illness is reported of Mrs. John Morton at the home of her son, Rev. Harvey H. Morton, D. D., Trinidad. With her husband she founded the Trinidad Mission over sixty years ago, she is probably the oldest missionary still on the foreign field. Dr. L. M. Silver of Halifax, is a brother of this distinguished lady.

Dr. J. C. Morrison of New Waterford, was on a delegation to Ottawa late in March in the interest of some town matters.

Impressed with the ignorance shown by many students entering preparatory collegiate schools, and even universities, in sex hygiene Dr. C. E. A. deWitt, of Wolfville, is giving a series of talks to the boys over 12 years of age in the town schools.

In Philadelphia on March 12th. a party, made up largely of Nova Scotians, witnessed the marriage of Dorothy Braine, second daughter of Dr. L. B. Braine of Annapolis Royal, to Mr. Charles R. Clark of Philadelphia, but formerly of Tatamagouche. Beside the bride and groom at least nine of the guests were former Nova Scotians.

Dr. George D. Stewart of New York, and formerly of Malagash, Cumberland County, spent two weeks early in March at the Jekyl Island Club, Brunswick, Ga. It was a professional trip as he was in attendance upon George F. Baker the New York financier.

Dr. W. R. Dickie of Barton, recently spent several days in Halifax

Citations have been served on 29 heirs of the late Dr. A. H. Gannon of New Waterford, to appear before Judge Crowe on April 19th. Dr. Gannon died in North Sydney after a brief illness, August 23, 1926. The estate is valued at about \$20,000.00.

Dr. J. F. Macaulay of Sydney, after a three week's stay in Boston, has returned to his home. The profession will be glad to know that Mrs. Macaulay is making a satisfactory convalescence.

Miss Killam, daughter of Dr. H. E. Killam, Lakeville, a student at the Provincial Normal College, was recently operated on, in the Colchester Hospital, for Appendicitis and is making a good recovery.

Dr. Charles W. McMillan, Dalhousie University 1924, who is now on the staff of the River Glade Sanatorium spent a recent week end in Halifax.

Dr. Clarence F. Moriarty, Dalhousie 1925, after a year or more with the Rockfeller Foundation in Health work in the Southern States is being sent to the Phillipines to do research work in Malaria. He is a son of Mr. and Mrs. P. F. Moriarty of Halifax.

Dr. L. L. Crowe, University of Toronto, 1923, of Bridgetown, accompanied by Mrs. Crowe, left April first for New York where he will put in a period of post graduate work before proceding to North Bay, Ontario, where he will locate. Dr. Crowe has practised in Bridgetown, his home town, for three years and his services were greatly appreciated. He was recently elected by acclamation to the Town Council. The Curling Club and the Sunday School, of which he has been superintendent, made him presentations. Both he and Mrs. Crowe were fine musicians and their departure is regretted by the entire community.

Mrs. Calkin, wife of Dr. B. H. Calkin of Stellarton, left on March 24th. for a trip to the West Indies. Mrs. Calkin has not been well recently and it is hoped the trip will improve her health.

Dr. Ross Millar of Amherst, is making a trip around the world. When last heard from he was in Japan. He has been gone already abuot three months.

ANNUAL MEETING, JULY 1927, AT SYDNEY

OFFICERS FOR 1926-1927.

President	Dr. J. J. Roy, Sydney.
1st Vice-President	Dr. L. R. Morse, Lawrencetown,
2nd Vice-President	Dr. H. K. MacDonald, Halifax.
Secretary-Treasurer	Dr. J. G. D. Campbell, Halifax.
Assistant-Secretary	Dr. S. L. Walker, Halifax.

EXECUTIVE.

DILD	
Cape Breton Branch. Dr. D. McNeil, Glace Bay. Dr. Dan McDonald, North Sydney. Dr. L. J. Johnstone, Sydney Mines.	Valley Branch. Dr. R. O. Bethune, Berwick. Dr. L. L. Crowe, Bridgetown. Dr. A. B. Campbell, Bear River.
Cumberland Branch. Dr. J. A. Munro, Amherst. Dr. W. T. Purdy, Amherst.	Pictou Branch. Dr. S. G. McKenzie, Westville. Dr. G. A. Dunn, Pictou.
Halifax Branch. Dr. J. V. Graham, 51 Coburg Rd. Dr. W. L. Muir, 240 Jubilee Rd.	Eastern Counties Branch. Dr. W. F. McKinnon, Antigonish.
Dr. P. Weatherbe. Dr. G. H. Murphy. Dr. S. R. Johnson.	Dr. F. D. Charman, Truro. Dr. F. R. Shankel, Windsor.
Dr. W. N. Rehfuss, Bridgewater. Dr. W. N. Cochran, Mahone Bay.	Western Counties Branch. Dr. A. R. Campbell, Yarmouth. Dr. C. A. Webster, Yarmouth.

COMMITTEES

Committee of Arrangements.

The Cane Proton Medical Society

The Cape B	reton Medical Society.
Cogswell Library Committee.	Public Health Committee
Dr. A. G. Nicholls, Chairman.	Dr. A. C. Jost, Chairman.
Dr. J. R. Corston.	Dr. R. L. Blackadar.
Dr. John Stewart.	Dr. J. K. McLeod.
Dr. Philip Weatherbee.	Dr. W. N. Rehfuss.
Dr. C. S. Morton.	Dr. C. W. Bliss.
Editorial Boar	d of C. M. A. Journal.
Dr. W. H. Hattie	Dr. K. A. MacKenzie

Di. W. II. Hattle.	DI. IX. A. WIACIXCHZIE.
Dr. G. H. Murphy.	Dr. E. V. Hogan.
Dr. J. G. MacDougall.	Dr. H. B. Atlee.
Workmen's Compensation Board.	Cancer Committee.
Dr. G. H. Murphy.	Dr. John Stewart.
Dr. M. G. Burris.	Dr. D. J. MacKenzie.
Dr. E. V. Hogan.	Dr. E. V. Hogan.
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Mem	hore	of	0	M	A	Counc	-11

Dr. J. J. Roy. Dr. J. G. D. Campbell Dr. S. L. Walker. Dr. W. J. Egan. (Ex-Officio).	Dr. L. R. Morse. Dr. E. D. MacLean. Dr. O. B. Keddy. Dr. Ross Millar.
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Members of Narcotic Drugs' Committee. Dr. V. N. MacKay, Halifax.

Chairman, Dr. A. C. Jost, with power to appoint his own committee. Nova Scotia Representative on Board of Governors of the Victorian Order of Nurses.

Dr. C. S. Morton, Halifax, N. S.

Members of	of t	the Provincial Medical B	oard.
Dr. G. H. Murphy.		Dr. John MacDo	nald.
Dr. J. G. MacDougall.		Dr. H. K. MacDe	onald.
Dr. G. W. T. Farrish.		Dr. Jordan Smith	1.

DIRECTORY AFFILIATED BRANCHES

CAPE BRETON

President	. Dr. D. W. Archibald, Sydney Mines.
Vice-President	.Dr. M. G. Tompkins, Dominion.
	Dr. J. C. Morrison, New Waterford.
Secretary-Treasurer	Dr Ray Rose Sydney

Nominated to the Executive of the Medical Society of Nova Scotia Dr. D. McNeil, Glace Bay; Dr. Dan McDonald, North Sydney; Dr. E. J. Johnston, Sydney.

Annual Meeting 2nd Thursday in May.

COLCHESTER-HANTS

Officers 1926-27

President	Dr. Daniel Murray, Tatamagouche.
Vice-President	Dr. Gordon Kent Smith, Hantsport.
Secretary-Treasurer	

Executive Committee

AMOUNTAIN COMMISSION					
Dr. A. R. Reid,	Windsor.		Dr. Arthur	Hines,	Cheverie.
	Dr. F. L.	Moore.	Economy.		

Members of The N. S. Executive.

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Dr. F. D. Charman, Truro		Dr. F. R.	Shankell, Windsor.

CUMBERLAND COUNTY.

Officers 1926-27

President	Dr. Ross Millar, Amherst.	
Vice-President	Dr. M. J. Wardrope, Sprin	igfield.
Secretary-Treasurer	Dr. W. T. Purdy, Amherst	

Nominated to the Executive of the Medical Society of Nova Scotia.

Dr. J. A. Munro, Amherst, and Dr. W. T. Purdy, Amherst.

EASTERN COUNTIES

Hon. Pfesident	. Dr. G. E. Buckley, Guysboro.
President	.Dr. J. J. McRitchie, Goldboro.
1st Vice-President	.Dr. R. F. McDonald, Antigonish.
2nd Vice-President	
Secretary-Treasurer	.Dr. P. S. Campbell, Port Hood.

Executive Committee.

Dr. O. R. Stone.	Dr. P. S. Cochrane.
Dr. W. F. McKinnon.	Dr. J. A. McDonald.
Dr. D. M. Chisholm.	Dr. J. S. Brean.

Representative to Provincial Executive Dr. J. L. McIsaac.

DIRECTORY AFFILIATED BRANCHES

LUNENBURG-QUEENS

Officers 1926-27

President	Dr.	F. R.	Davis, Bridgewater.
Vice-President	Dr.	G. A.	Barss, Rose Bay.
Secretary-Treasurer	Dr.	C. A.	Donkin, Bridgewater.

Executive

The above Officers with:

The officers and Dr. W. N. Cochran, Mahone Bay and Dr. A. E. G. Forbes, Lunenburg.

Nominated to the Executive of the Medical Society of Nova Scotia

Dr. W. N. Rehfuss, Bridgewater and Dr. W. N. Cochran, Mahone Bay.
Annual Meeting is held on the second Tuesday in June of each year, and other
Meetings on the second Tuesday of August and January, the time and place of the
two latter Meetings to be decided by the Executive.

PICTOU COUNTY

President	.Dr. Clarence Miller, New Glasgow.
Vice-President	.M. R. Young, Pictou.
Secretary-Treasurer	Dr. John Bell, New Glasgow.

Executive

Medical Society of Nova Scotia. .Dr. S. G. McKenzie, Westville.
Dr. G. A. Dunn, Pictou.
Date of Annual Meeting—July 1927.

VALLEY MEDICAL SOCIETY

Presider	nt		Dr. William Grant, Wolfville.	
Vice-Pre	esident	t	Dr. W. R. Dickie, Barton.	
"	**		Dr. A. A. Deckman, Bridgetow	vn.
"	"		Dr. J. P. McGrath, Kentville.	
Secretar	y-Tre	asurer	. Dr. C. E. A. DeWitt, Wolfville	e.

Executive

Medical Society	of Nova	Scotia	.Dr. R	. 0.	Bethune, Berwick
			Dr. L	. L.	Crowe, Bridgetown
					Campbell, Bear River

Date of Annual Meeting in May. Semi Annual in October.

WESTERN NOVA SCOTIA MEDICAL ASSOCIATION

Officers 1926-27

President	. Dr. W. C. O'Brien for Wedgeport, Yar. Co.
Vice-President	Dr. S. H. Thibault for Digby County.
	.Dr. L. O. Fuller for Shelburne County.
" "	.Dr. A. R. Melanson for Yarmouth County.
Secretary-Treasurer	.Dr. Thomas A. Lebbetter, Yarmouth.

Representatives to the Nova Scotia Medical Society Executive:

Doctors A. R. Campbell and C. A. Webster, of Yarmouth.

DIRECTORY AFFILIATED BRANCHES

HALIFAX BRANCH

President	Dr. P. Weatherbee, 316 Barrington St.
Vice-President	Dr. G. H. Murphy, 28 Carleton St.
	Dr. S. R. Johnson, 54 Inglis St.
	Dr. A. E. Doull, $34\frac{1}{2}$ Morris St.
SecTreas	Dr. V. O. Mader, 7 Spring Garden Road.
Executive	The Officers and Drs. Graham and Muir

PROPOSED PROGRAMME FOR THE SEASON.

Oct. 13th, 1926. Opening Meeting....Ashburn Presidential Address.

Oct. 27th, 1926. N. S. Hospital, Dr. Lawlor and Staff.

Nov. 10th, 1926. Room 11 Medical Science Building "Arthritis and Arthopathies."

Discussion opened by Dr. Philip McLarren, followed by Dr. Lyons and Dr. D. J. MacDonald.

Nov. 24th, 1926. Victoria General Hospital, Surgical Clinic.

Dec. 8th, 1926. Room 11 Medical Science Building, Dr. Lawlor.

Jan. 5th, 1927. Victoria General Hospital, Medical Clinic.

Jan. 19th, 1927. Room 11 Medical Science Building.
Dr. Babkin—"The exogenous and endogenous chemical stimuli of motility of the alimentary canal.

Feb. 2nd, 1927. Childrens' Hospital. Clinical Evening.

Feb. 16th, 1927. Room 11 Medical Science Building. Dr. Evatt Mathers-"Corneal Ulcer."

Mar. 2nd, 1927. Room 11 Medical Science Building. Dr. Hector McKay, New Glasgow.

Mar. 30th, 1927. Room 11 Medical Science Building. President McKenzie—"Medical Education."

Apr. 13th, 1927. Room 11 Medical Science Building. "Goitre."

Doctors Eberts and Gordon, Montreal.

Apr. 27th, 1927. Annual Meeting. Election of Officers, etc.