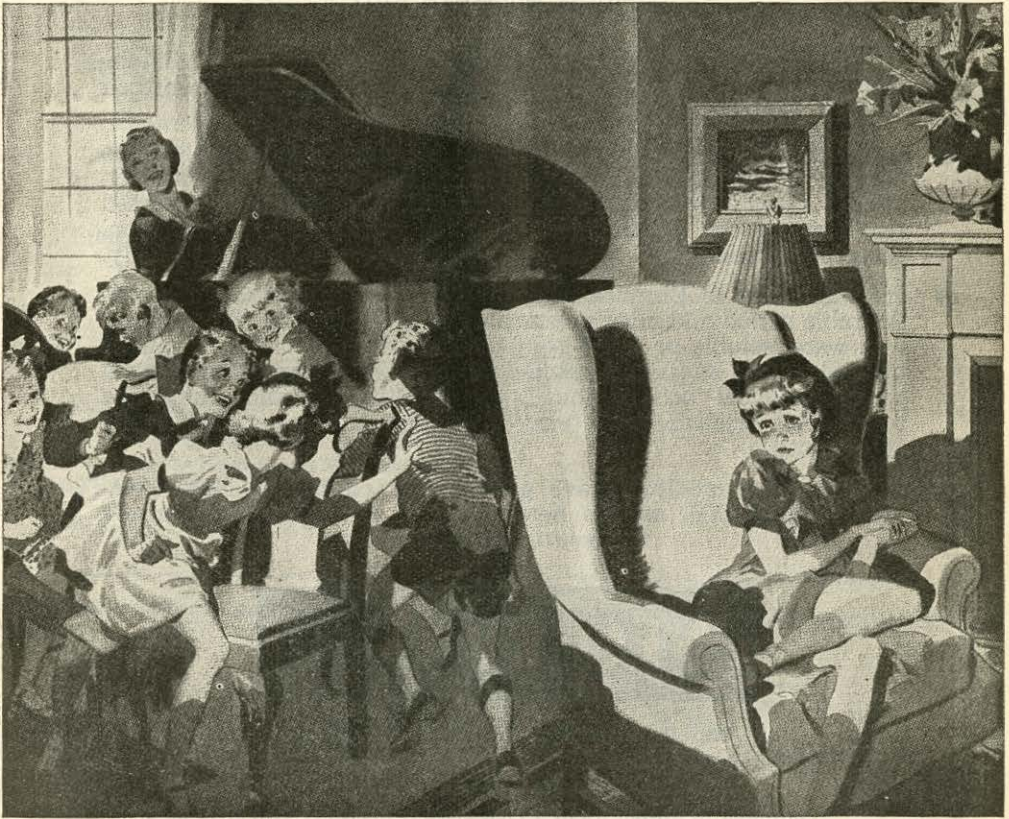


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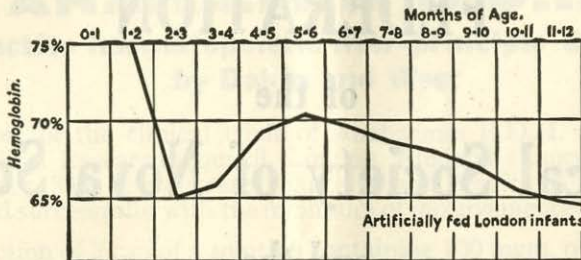
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Early in July the Committee appointed by the Medical Society of Nova Scotia to study the question of federation with the Canadian Medical Association will communicate with every doctor in the province, asking for each individual's position in this question.

Please refer to recent issues of the Bulletin (August, 1935, February and April, 1936) for discussion of this matter.

It is requested that answers be filled out and returned promptly, for the guidance of the Committee in the formulation of its final report.

# Nutritional Anemia in Infants



Hemoglobin level in the blood of infants of various ages. Note fall in hemoglobin, which is closely parallel to that of diminishing iron reserve in liver of average infant. Chart adapted from Mackay. It is possible to increase significantly the iron intake of the bottle-fed from birth by feeding Dextrin-Maltose With Vitamin B in the milk formula. After the third month Pablum offers substantial amounts of iron for both breast- and bottle-fed babies.

## Reasons for Early Pablum Feedings

1. The iron stored in the infant's liver at birth is rapidly depleted during the first months of life. (Mackay,<sup>1</sup> Elvehjem.<sup>2</sup>)
2. During this period the infant's diet contains very little iron—1.44 mg. per day from the average bottle formulae of 20 ounces, or possibly 1.7 mg. per day from 28 ounces of breast milk. (Holt.<sup>3</sup>)

For these reasons, and also because of the low hemoglobin values so frequent among pregnant and nursing mothers (Coons,<sup>4</sup> Galloway<sup>5</sup>), the pediatric trend is constantly toward the addition of iron-containing foods at an earlier age, as early as the third or fourth month. (Blatt,<sup>6</sup> Glazier,<sup>7</sup> Lynch<sup>8</sup>).

## The Choice of the Iron-Containing Food

1. Many foods reputed to be high in iron actually add very few milligrams to the diet because much of the iron is lost in cooking or because the amount fed is necessarily small or because the food has a high percentage of water. Strained spinach, for instance, contains only 1 to 1.4 mg. of iron per 100 gm. (Bridges.<sup>9</sup>)
2. To be effective, food iron should be in soluble form. Some foods fairly high in total iron are low in soluble iron. (Summerfeldt.<sup>10</sup>)
3. Pablum is high both in total iron (30 mg. per 100 gm.) and soluble iron (7.8 mg. per 100 gm.) and can be fed in significant amounts without digestive upsets as early as the third month, before the initial store of iron in the liver is depleted. Pablum also forms an iron-valuable addition to the diet of pregnant and nursing mothers.

Pablum (Mead's Cereal thoroughly cooked and dried) consists of wheatmeal, oatmeal, cornmeal, wheat embryo, brewers' yeast, alfalfa leaf, beef bone, iron salt and sodium chloride.

<sup>1-10</sup> Bibliography on request.

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# Notes on Applied Anatomy

DONALD MAINLAND, M.B., Ch.B., D.Sc.,

Department of Anatomy, Dalhousie University, Halifax, N. S.

THE Applied Anatomy exhibition at the Dalhousie Refresher Course in 1935 elicited encouraging comments from visitors, and it would perhaps be of value to present in a more permanent form some of the information given at the exhibition. Of the thirty-eight exhibits twenty-four were specimens and the remainder mostly diagrams and notes. Among the notes a discussion of anatomical teaching was introduced, to call forth criticisms and constructive suggestions. Part of the discussion has been embodied in an editorial in the Canadian Medical Association Journal, (Mainland, 1935), but a few points may be recalled here, first, because other exhibits illustrated some of them, and, secondly, because of the interest displayed by clinicians in the Province towards the modifications in anatomical teaching now being made in this Department. Certain central ideas were as follows: (1) In Canada one can in teaching anatomy take the best features of two traditions—the British and the American. The British tradition is one of anatomy as a surgeon's tool, anatomy taught accurately and thoroughly, but on the cadaver—a tradition carried to extremes when the Council of the Royal College of Surgeons of England refused to allow an examiner to test Fellowship students on a living subject. American anatomy, on the other hand, stresses living processes and the principles that underlie structure, but it has lately neglected regional human anatomy so much that surgeons have in print made anatomical statements that a properly trained second-year student can criticize. (2) British anatomy, led away from the sound methods of John Hunter, followed for years the French descriptive anatomists who took a pride in avoiding reference to function, which they left entirely to the physiologists. A return is now being made to the Hunterian method, for various reasons—first, because it is unnatural to make such a complete cleavage between structure and function; secondly, because there are many problems of function that the physiologist does not treat; and, thirdly, because modern surgery itself, after attaining a high technical skill, is adding to that a quest for a wider knowledge of function and of the underlying principles that determine structure.

It may be of interest to have some of these matters in mind while glancing through the notes based on the exhibition referred to. As the exhibition was designed to cater for practitioners and others of widely varied interests, no subject was treated exhaustively, and for the present article still further selection has been made. Many of the facts and ideas will doubtless be familiar, but a reminder even of things that are known is often useful, especially when a clue to sources of further information is given.

## *The Thigh with Special Reference to Muscle Action.*

Anatomical teaching regarding muscle action is in a very backward state. It is largely based on (a) the actions that could be performed in virtue of the muscle attachments, and (b) the effect of electrical stimulation of nerves to

individual muscles. The text-book lists of muscles, e.g. flexors of the hip-joint or flexors of the knee-joint, are often misleading to one who has to treat paralysis. What is needed is more knowledge and more teaching of the actions of muscles in the living person—often a very difficult thing to determine. Mackenzie's (1930) "Action of Muscles" is a work of great value, although his arguments from comparative anatomy may be treacherous, because a muscle that has one primary action in one animal may have a different primary action in another where mechanical conditions are different. Mackenzie's insistence on the principle of the "minimal load" in testing muscles for paralysis and in muscle re-education shows the importance of simple physics in considering muscle action. The unqualified statement that the quadriceps extends the knee implies that a quadriceps that does not do so is paralyzed; but a quadriceps that can do nothing when a seated patient is asked to lift his foot by straightening the knee, may show considerable extensor power when the patient lies on his side so that the muscle has not to overcome the force of gravity.

Another useful book on muscle action is Eowen's (1934) "Applied Anatomy and Kinesiology", which treats the matter largely with reference to physical education. The most useful of all, however, is Wright's (1928) "Muscle Function", the results of some twenty years' patient observation of normal and paralyzed muscles.

#### *The Great Saphenous Vein.*

The specimen exhibited showed some communicating veins connecting the great saphenous vein with deep veins. If disease, e.g. "white leg", has obliterated the communicating or the deep veins, interference with varicose superficial veins is contra-indicated. The patency of the deep and communicating veins is determined by the tourniquet test (McGregor, 1934, pp. 463-4). In varicose veins the blood-flow when the patient is erect is downward to the deep veins, and it is said that even in the normal this is the direction below the knee. A specimen of the popliteal region showed the small saphenous vein draining into the popliteal vein and communicating with other deep veins at the back of the thigh. The small and great saphenous systems communicate freely with each other.

In contrast to the venous communications, the deep fascia forms a barrier between the superficial and deep lymphatics, and the rationale of the Kondoléon operation for elephantiasis is the removal of this barrier.

The proximity of the saphenous nerve to the great saphenous vein in the leg region should be noted as a probable cause of part of the pain in varicose veins. It should be remembered also in injection treatment.

A survey of the late results of injection treatment and a discussion, among other things, of some anatomical points is given by Colt, Ramsay and Morrison (1935).

#### *The Semilunar Cartilages of the Knee.*

The specimen illustrated the differences between the medial (internal) and the lateral (external) cartilage, e.g. the medial more crescent-shaped, adherent to the deep aspect of the tibial collateral ligament; the lateral cartilage more circular, not adherent to the fibular collateral ligament because of the intervening tendon of the popliteus, and therefore more mobile than the medial cartilage. Numerous explanations have been given of the mechan-



ism of damage of the cartilages and various anatomical differences between the two have been pointed out as a cause of the much greater frequency of injury of the medial—differences in shape, size, mobility and attachments. One must beware of such explanations here and elsewhere in the body. Experimental proof or crucial observations are difficult or impossible, and it is easy to find an anatomical difference that might explain a clinical finding and then commit the fallacy of dogmatic argument from mere association to cause and effect. If it had been found that lesions of the lateral cartilage were commoner, it would doubtless have been attributed to its greater mobility allowing it to slip in and get caught between the bones! Examination of such arguments has led the writer to agree with Lake and Marshall (1934, pp. 674-5), who consider that the great predominance of lesions of the medial cartilage "is due to the abducted position of the tibia at the moment the injury is sustained. The ligaments and other structures on the inner (medial) aspect are then taut, but the internal (medial) cartilage is sucked towards the centre of the joint, a condition in which tearing is much more likely to occur. Whether, however, the lesion is a direct result of the forces applied to the cartilage or whether this structure is first nipped between the bones upon cessation of abduction and, thus fixed, subsequently torn by the further movement of the femur upon the tibia, is undecided".

#### *The Bursae at the Knee.*

The insistence of anatomists on the learning of the dozen bursae near the knee-joint has been a "source of innocent merriment" to more than one clinical worker, chiefly to physicians. The chief bursae are easily remembered:

The *suprapatellar* bursa, deep to the quadriceps, extending for three fingers'-breadths above the patella, and usually communicating with the joint.

The *semimembranosus* bursa, between that muscle and the medial head of the gastrocnemius, and folded on itself deep to the latter muscle. This is a common site of swelling, which is tense on extension, but may be made to disappear on flexion, even although the bursa does not always communicate with the joint.

The *infrapatellar* bursae, one between the ligamentum patellae and the tibia and one superficial to the ligamentum patellae.

The *prepatellar* bursa has been made needlessly complicated on account of the names, subcutaneous, subfascial and subtendinous, each with a somewhat different description of location. It is a bursa superficial to the patella and the proximal part of the ligamentum patellae. It may be divided into bursae lying at different depths from the skin surface and the subdivisions may be entirely cut off from each other or they may not.

The synovial prolongation or bursa from the knee-joint along the deep surface of the *popliteus* tendon may communicate with the proximal tibio-fibular joint and thither convey knee infections. This communication is easily understood, because in the human foetus and in various animals the fibula takes part in the formation of the knee-joint.

The remaining bursae every now and then provide an answer to those who scoff at the knowledge of their location. Thus, von Dittrich (1935) reports a series of cases of enlargement of the small bursa between the biceps tendon and the fibular collateral (external lateral) ligament of the knee, suggesting rupture of ligament or tendon. It therefore still seems desirable for

students to become acquainted with all the bursae, and later, when a swelling of doubtful significance presents itself in the knee region, to be prepared to refer to a comprehensive anatomical text-book, not merely a surgical anatomy, which is apt to mention only the important bursae. For such references Jamieson's (1935) small "Companion", referred to in the final section of this paper, is admirable.

#### *The Arches of the Foot.*

Fortunately one nowadays seldom sees the statement that ligaments are the primary support of the foot arches, but there is some hesitation in applying to other joints the principle involved, namely that fibrous tissue (as in ligaments) is not designed for continuous strain. Thus one still reads of the mythical locking mechanism of the knee in the erect posture, a mechanism whereby the ligaments are supposed to take the strain off the muscles.

Jones and Lovett (1929) pointed out that healthy feet of different people differ widely in the height of their arches, i.e. that a flat foot is not necessarily one in which the arch has fallen. Blundell Bankart, the London orthopaedic surgeon, goes farther. In his book, "Manipulative Surgery" (1932) and in a personal communication to the writer, Dr. Bankart points out that the healthy foot, exhibited by children, by natives that habitually go barefoot and by ballet dancers, is a foot that "is so supple that it can be completely flattened or raised into the form of an arch at will. Unfortunately the majority of civilized people through wearing boots and shoes, have lost much of the natural mobility of their feet, which have become fixed more or less in a position of action. In other words, they have acquired contractures of their feet" (Bankart, 1932, p. 40). After witnessing cases of so-called "flat foot" or foot strain cured by bone-setters' manipulations, Bankart adopted with success this kind of method, followed by massage and both active and passive movements to strengthen the muscles.

Treatment of disease is not within the scope of the present article, but it is the anatomist's function to determine norms, and, in the foot, dissecting room specimens and even living shoe-wearing people are obviously not the best source of information. Moreover, this belief in the natural mobility of the foot is entirely in keeping with discoveries in other parts of the body, e.g. the abdomen, where dissecting room impressions have produced extremely erroneous notions.

#### *Structures in the Upper Arm and Forearm.*

Dissections were shown as a reminder of, for example: the axillary (circumflex) nerve, liable to pressure in shoulder dislocation and in fracture of the surgical neck of the humerus; the radial (musculo-spiral) nerve, which may be involved in fracture of the humeral shaft or later by callus formation. Bruce and Walmsley's (1935) edition of Beesly and Johnston's "Manual of Surgical Anatomy" gives useful discussions of such topics, with good anatomical illustrations.

#### *The Palm of the Hand.*

Numerous structures were shown, e.g. the superficial palmar arch and its digital branches. The fourth of these, numbered from the ulnar side, runs to the cleft between the middle and index fingers. Quite often it runs obliquely and renders dangerous an incision along the line of the distal half

of the middle metacarpal, whereas the distal halves of the second and fourth metacarpals are not crossed by arteries.

In the fingers the digital arteries and nerves lie alongside the tendon sheaths rather than along the phalanges, and therefore, from this point of view, an incision at the sides of the phalanges is safer than one along the sheaths.

The evolutionary history of the palm points to the palmaris longus and its expanded tendon (the palmar aponeurosis or fascia) as a flexor of the proximal phalanges, and this explains the processes from the palmar fascia to the proximal phalanges (by way of an attachment to the fibrous flexor sheaths). This in turn explains why Dupuytren's contracture produces flexion of the proximal phalanges.

A specimen showed Kanavel's mid-palmar and thenar spaces, so important in the limitation and spread of palmar infection. It may be mentioned that, although Kanavel's book is necessary for details, a shorter and very good exposition is to be found in Fifield's (1926) "Infections of the Hand".

#### *Some Nerves to Muscles of the Anterior Abdominal Wall.*

(a) *In the Upper Part of the Wall.* In the specimen, the anterior terminal branches of the following thoracic (dorsal) nerves supplying the rectus abdominis were labelled:

T 8, near the costal margin, passing upwards as it went medially;

T 9, passing somewhat upwards as it went medially;

T 10, passing somewhat downwards as it went medially.

The highest nerve supplying the rectus below the costal margin was T 8, instead of the more usual T 7, but this is an unimportant point compared with the direction of the nerves. It is strange that mis-statements regarding the course of these nerves should be so widespread. It is still not uncommonly taught that the highest nerves to the rectus, T 7, 8 and 9, run, like the lower nerves, downwards and medially. It is very much more common to find them running as in the specimen under discussion, and this is obviously important in connection with incisions in this region. There appears to be, perhaps, some indication that one can get a clue to the course of the nerves by noting the slope of the ribs before incisions are made, and investigations on the matter have been commenced in this Department.

(b) *In the Lower Part of the Wall.* The anterior branches of ilio-hypogastric and ilio-inguinal nerves both run between the internal oblique and transversus abdominis. The ilio-inguinal nerve is the lower. This nerve later comes to lie between the external and internal oblique muscles a short distance above the inguinal ligament, and therefore enters the anterior part of the inguinal canal. Observations made by Professor J. C. B. Grant in Winnipeg and continued in this Department show that the relation of the ilio-inguinal nerve to the spermatic cord is variable. It may nevertheless be important to find the nerve in operations on inguinal hernia, hydrocoele, varicocele and so on, because, if the nerve is injured or caught in scar tissue, considerable discomfort may follow. To avoid this, some surgeons search for the nerve and divide it as a routine. After reaching the inguinal canal it is purely sensory, and therefore there need be no fear of inguinal hernia if it is cut here. In contrast, however, before it reaches the canal, the ilio-inguinal nerve, and the ilio-hypogastric also, supply muscular branches to the parts of the internal oblique and transversus that form the conjoined tendon, which is so important

in the formation of the inguinal canal. McBurney's incision for appendectomy or left inguinal colostomy is very apt to catch one or other of these nerves, or the last thoracic, which runs a little higher than the ilio-hypogastric. Some authors have claimed thirty per cent incidence of hernia following this type of incision.

It is noteworthy that one cannot be sure exactly where these various nerves will lie, nor how large or small, nor where they will branch. The ilio-hypogastric and ilio-inguinal both come from the first lumbar nerve and, as might be expected, may supplant each other to a greater or less extent.

With reference both to upper and lower parts of the abdominal wall, it is of interest to quote the statement of Professor C. C. Choyce, Director of the Surgical Unit, University College Hospital, London, England: "Many methods of abdominal opening have been devised in the past but the remembrance of the vital importance of preserving the integrity of the motor nerves and consideration of their arrangement will convince the reader that a large proportion of cases are best treated by paramedian incisions. Thus any infracostal oblique incisions, for exposure of the gall-bladder or spleen for example, are, I think to be condemned because they divide thoracic nerves. . . ." (Treves and Choyce, 1934, p. 381).

Those who have only infrequently to make abdominal incisions will find useful descriptions in McGregor's (1934) "Synopsis of Surgical Anatomy", pp. 557-572.

#### *Variations in Hepatic Arteries.*

The accompanying sketches (Figs. 1-6) illustrate some of the variations, described chiefly by Flint, but met in any dissecting room. A good account is given by McGregor (1934, pp. 63-5) who also gives (pp. 62-3) Flint's description of bile-duct variations. In view of the numerous types and subtypes of variation, the question may be asked: Is it not sufficient for the surgeon to know that variations exist, and to deal with what he meets in the individual case? Surgeons who work in this field, however, assert that acquaintance with Flint's findings is highly desirable, particularly with regard to the possible occurrence of accessory arteries.

The system of hepatic arteries that is usually described was called "normal" by McGregor (loc.cit.) and the other arrangements were called "abnormalities". This designation overlooks the great capacity for variation in the normal human arterial and all other systems. It is not even justifiable to suppose, without other evidence, that this region is unusually liable to variation. It is rather that, owing to its surgical importance, this region has received special attention. Professor Congdon, the anatomist at Long Island College of Medicine, recently remarked to the writer that there is probably no one arterial pattern in any region that holds for more than fifty per cent of persons. We have still very little scientific knowledge of the normal variation of any system and yet the phrase "research in anatomy" is often greeted with a smile!

#### *The Obturator Nerve.*

The obturator nerve frequently supplies skin over a considerable extent of the medial side of the thigh. Pain or hyperaesthesia may be found here when the nerve is pressed on or irritated more proximally. The obturator nerve supplies both hip and knee. To this has been attributed the knee pain

in hip-joint disease, but an equally good explanation is that the pain is referred along the cutaneous branch which reaches the knee region. This may, in fact, be a better explanation, because the branch to the knee-joint is not always found, even by careful dissection. Disease in the pelvic (sigmoid) colon, e.g. carcinoma, or even distension with faeces, may be manifested by pain in the knee.

The obturator nerve as it enters the pelvis passes close to the sacro-iliac joint, and disease there may give pain in the hip, knee or the medial side of the thigh. As the nerve runs on the side wall of the pelvis the ovary, uterine tube and a pelvic appendix lie close to it. Obturator hernia is rare, but, when present, presses its way out through the small rigid canal by which the nerve emerges from the pelvis.

#### *The Cardinal Ligament of the Female Pelvis.*

The specimen on exhibition displayed as much of this ligament as can usually be seen in an aged dissecting room subject. Victor Bonney (1934), writing on "the principles that should underlie all operations for prolapse" describes this ligament, a right and a left, as follows. (Fig. 7): It is the main structure holding the upper two-thirds of the vagina in position. It is fibro-muscular and lies along the whole length of the lateral vaginal wall above the levator ani diaphragm, reaching as high as the supravaginal part of the cervix and extending far below the uterine artery. It is attached laterally to the fascia covering the side wall of the pelvis, and has been called Mackenrodt's ligament, the transverse ligament, the cervico-pelvic ligament and the utero-sacral ligament. The last name denotes that it can be traced backwards to the sacrum. Bonney claims to have isolated this ligament in the living five hundred times, but admits that it is not well seen in dissecting room subjects.

The ligament is claimed to be relatively avascular, but in the dissecting room a varying number of small veins can be found in the region occupied by it.

#### *Rectal Examination.*

It will be recalled that a surgical writer said that a finger-stall should be hung up at every patient's bed to remind the doctor of the value of a rectal examination. A very comprehensive list of findings (normal and some abnormal) is given by McGregor (1934, pp. 458-460), from which the following examples, in the male, are taken:

*Anteriorly*—The membranous urethra is not palpable; a stone in it may be felt, so may a bougie. Bulbo-urethral glands (Cowper's) may, if enlarged, be felt between the finger in the rectum and the thumb on the perineum. The prostate in children is vestigial and therefore even a small stone in the bladder may be felt in boys. The seminal vesicles are indistinctly felt when healthy, and the lower ends of the deferent ducts (vasa) are felt above the prostate when diseased. The trigone of the bladder is felt between the vesicles, particularly if the bladder is full. If the prostate is much enlarged the finger cannot reach the bladder. The recto-vesical pouch of peritoneum—its floor is about three inches from the anus with the bladder full, about two inches with the bladder empty.

*Posteriorly and at the sides*—Lymph glands can be felt if enlarged.

*In the lumen*—The lowest transverse fold of the rectum (valve of Houston) can sometimes be felt projecting into the lumen of the bowel.

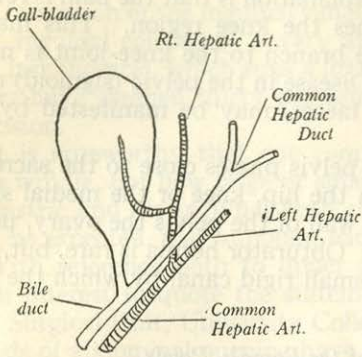


Fig. 1.—Hepatic Arteries as Usually Described.

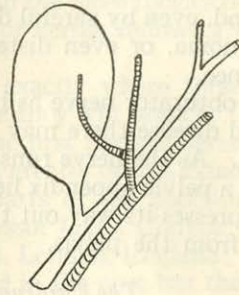


Fig. 2.—Right Hepatic Artery Anterior to Common Hepatic Duct.

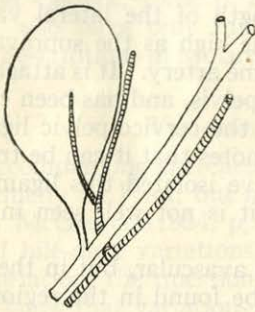


Fig. 3.—Right Hepatic Artery Near Cystic Duct. (They may be in close contact.)

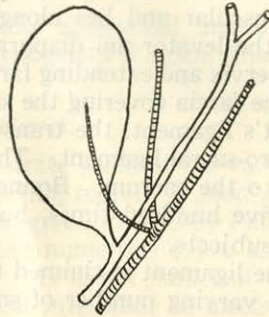


Fig. 4.—Cystic Artery Anterior to Common Hepatic Duct.

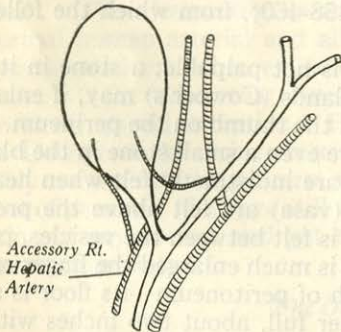


Fig. 5.—Accessory Right Hepatic Artery from Superior Mesenteric.

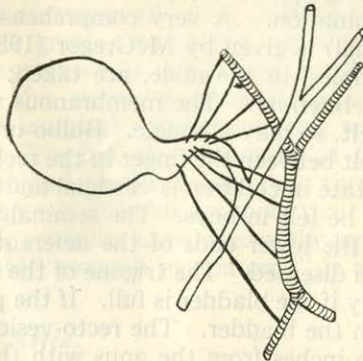


Fig. 6.—Variations in Cystic Artery.

(Figs. 1-6. From McGregor, 1934; 1-5, after Flint; 6, after Rio-Brancho.)

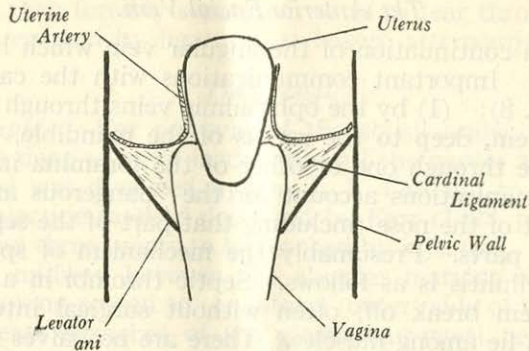


Fig. 7.—The Cardinal Ligament.

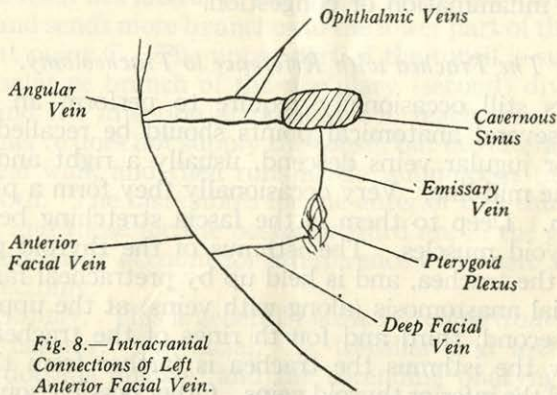


Fig. 8.—Intracranial Connections of Left Anterior Facial Vein.

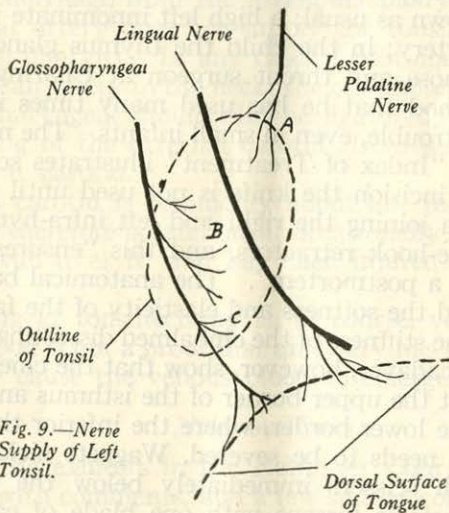


Fig. 9.—Nerve Supply of Left Tonsil.

*The Anterior Facial Vein.*

The vein is a continuation of the angular vein which lies at the medial angle of the eye. Important communications with the cavernous sinus in the skull are (Fig. 8): (1) by the ophthalmic veins through the orbit; (2) by the deep facial vein, deep to the ramus of the mandible, to the pterygoid plexus and thence through one or other of the foramina in the base of the skull. The communications account for the "dangerous area" of the face, i.e. the lower part of the nose (including that part of the septum), the upper lip and adjacent parts. Presumably the mechanism of spread of infection from a boil or cellulitis is as follows. Septic thrombi in a tributary of the anterior facial vein break off, often without surgical interference, simply because the veins lie among muscles. There are no valves in the veins, and thrombi can pass in any direction, depending on muscle pressure. The obvious precaution is avoidance of all unnecessary movement. Dissecting room experience suggests that ligation of the angular vein would be specially difficult in conditions of inflammation or congestion.

*The Trachea with Reference to Tracheotomy.*

Practitioners still occasionally require to perform an emergency tracheotomy, and several anatomical points should be recalled. Deep to the skin the anterior jugular veins descend, usually a right and a left, a short distance from the mid-line. Very occasionally they form a plexus in the tracheotomy region. Deep to them is the fascia stretching between the right and left infra-hyoid muscles. The isthmus of the thyroid gland lies below the first ring of the trachea, and is held up by pretracheal fascia. There is a transverse arterial anastomosis (along with veins) at the upper border of the isthmus. The second, third and fourth rings of the trachea lie behind the isthmus. Below the isthmus the trachea is farther from the skin surface, and on it descend the inferior thyroid veins. Other possible sources of difficulty, sometimes present, that make this region undesirable for tracheotomy are: an innominate artery or a left external carotid that has not passed to the side of the trachea as low down as usual; a high left innominate vein; a thyroidea ima (lowest thyroid) artery; in the child the thymus gland.

Waggett, an ear, nose and throat surgeon at Charing Cross Hospital mentions (1935) a method that he has used many times in the past forty years without the least trouble, even in small infants. The method, described by him in Hutchison's "Index of Treatment" illustrates several anatomical points. After the skin incision the knife is not used until required to open the trachea. The fascia joining the right and left infra-hyoid muscles is retracted by blunt double-hook retractors, and this "ensures a perfectly dry field resembling that of a postmortem". The anatomical basis of this is the relative avascularity and the softness and elasticity of the fascia and muscles in striking contrast to the stiffness of the embalmed dissecting room structures. Even dissections of the cadaver, however, show that the chief source of haemorrhage is likely to be at the upper border of the isthmus and especially from the venous plexus at the lower border, where the inferior thyroid veins commence. If the isthmus needs to be severed, Waggett nicks the pretracheal fascia horizontally with scissors immediately below the cricoid cartilage, and then passes haemostatic forceps with one blade of each down behind the isthmus, being specially careful to prevent the points of the forceps reach-



ing below the isthmus, lest they tear the plexus just mentioned. The handles of the forceps are then forcibly separated, so as to tear through the isthmus, and they can be replaced by ligatures at leisure afterwards.

#### *The Tonsil.*

(a) *Nerve Supply.* For removal of the tonsil under local anaesthesia injections must be done so as to insure that all the nerves are reached. The specimen exhibited was dissected by Dr. J. V. Graham to demonstrate the rationale of the injection method described by Farr (1923, p. 222). The diagram (Fig. 9) shows three points to be reached by injection. At B the needle, introduced about midway between the alveolar margins of the upper and lower jaws, and having passed to the lateral (outer) side of the anterior pillar of the fauces, meets branches of the glossopharyngeal nerve between the tonsil and the superior constrictor muscle, which lies lateral to the tonsil. As the specimen showed, the needle may puncture an arterial branch, and a slight change of position of the needle point will be necessary. The glossopharyngeal nerve itself lies lateral to the tonsil, separated from it by the superior constrictor, and sends more branches to the lower part of the tonsil, reached by an injection at point C. The upper part of the tonsil is supplied by twigs from the lesser palatine branch of the maxillary (second) division of the trigeminal nerve, and the injection at point A will reach these.

The lingual nerve does not supply the tonsil, but lies lateral to it, separated by the pharyngeal wall, and then runs in the submucous tissue adjacent to the last molar tooth. The taste fibres for the anterior two-thirds of the tongue are in this nerve and those for the posterior third are in the glossopharyngeal nerve. These facts easily account for interference with taste after local anaesthesia in tonsillectomy.

(b) *Arterial Supply.* This is generally stated to come from several branches of the external carotid: the facial, via tonsillar and ascending palatine; the lingual, via dorsalis linguae; and the ascending pharyngeal via tonsillar branches. It has been claimed that the only blood supply is from the facial, which certainly gives the chief supply. The point hardly seems worth labouring, because haemorrhage from the ascending pharyngeal, for example, can occur even if that artery does not supply the tonsil, for it lies against the lateral side of the pharynx. In any case, if post-operative haemorrhage demands ligation of an artery in the neck, the one chosen is the external carotid. The ascending pharyngeal should also be ligatured, because it comes off at the very beginning of the external carotid (from its deep surface), or even from the common carotid.

The internal carotid is commonly about one inch posterior and lateral to the tonsil, and therefore is safe, but it occasionally makes a loop, projecting the pharyngeal wall over it, and has been injured in such cases (Jackson, 1933).

Most bleeding at tonsillectomy is, of course, venous, and the spurting ejection of the blood is not a proof that an artery has been injured. An underlying artery may cause the venous blood to emerge in spurts.

#### *Notes on Books.*

The last of the exhibits in the Refresher Course demonstration was a display of books with comments, and a few similar comments may be of value here, in addition to the references made throughout the course of the article.

This is not difficult to understand. The concerns of medicine are manifold. The teeth have a whole profession organized about them; obviously they will be looked after. This in effect has been the medical attitude.

During the past two or three decades, however, several things have conjoined to bring the teeth into prominence in the medical world and to cause dentistry to view its problems from a different angle. In both camps there are signs of a steady reorientation. Two factors may be noted. There is first the growing interest in the maintenance of health rather than the curing of disease, and in the second place the gradual establishment of the doctrine of focal infection. Before these concepts became current the tooth practically stood by itself physiologically. It was a thing apart and of no consequence from the standpoint of medicine; and it was on a pedestal from the standpoint of dentistry.

The dental attitude at times tended to surround the tooth with a fictitious and even fantastic importance. Mastication being the initial step in nutrition, how easy to assume that, if not carried on by a perfectly articulated dentition, the whole nutritional process will be jeopardized at the start. The mechanical approach crystallized in such phrases as "masticatory apparatus" and "masticatory machine" was capable of almost limitless logical extension. In fact logic had pretty largely usurped the place of observation, a perilous condition of affairs where vital phenomena are concerned, as Claude Bernard understood so well even in his day. Following the line of Cuvier's doctrine of Harmonious Development but applying it in a manner that Cuvier never dreamed of in his most enthusiastic moments, it was easy to argue that the "forces of occlusion" (i.e. of mastication) which were endowed with an almost supernatural potency, were capable of exerting mysterious and far-reaching influences in tissues not only contiguous but relatively remote from the teeth. The development of the face was thought to be dependent almost solely on the forces generated by the muscles during first suckling and later chewing. The mechanical widening of the dental arches, a salutary procedure under certain conditions, was not only supposed at the same time to develop the anterior nares, a highly debatable claim, but some enthusiasts saw the possibility also of relieving an assumed pressure on the sella turcica via the vomer by this procedure, and thus releasing suppressed pituitary function and ensuring the developmental salvation of the individual—surely the apotheosis of the mechanical concept!

There is need that both professions develop a more rational conception of the physiological status of the teeth. Dentistry should understand that the teeth cannot be classed among the vital organs, and medicine should realize that they cannot be waived to one side because they are not essential to life. There are cogent reasons for suspecting that the teeth are in a degenerating area. Investigations carried on from the phylogenetic angle by Sir Arthur Keith and others tend to confirm this.<sup>4</sup> Their vulnerability to disease, and their tendency to irregularity and malrelation point in the same direction. This physiological instability, which possibly may be an expression of their progressive unimportance from the standpoint of the maintenance of life, tends rather to enhance their medical significance. The vermiform appendix has travelled so far along that road that it is doubtful if there is any function left to it, and yet its medical (or at least surgical) importance needs no advocate.

Dental service from the standpoint of prevention is handicapped by an inadequate knowledge of the causes of the conditions we are called upon to treat. The confused ideas regarding the relative importance of nutrition and genetics, of endocrine imbalance and other possible etiologic factors responsible for caries and irregularity, show that we are only starting on the road to a solution. Professor Brash of Edinburgh has told us that "The progress of medical science is in these days to be measured not so much by mere advances in the treatment of disease as by the extent of the knowledge—physiological and aetiological—which enables us to substitute a rational for an empirical basis of such treatment," and relative to the teeth he continues "The two main problems of Dental Science are, by common consent, of an aetiological nature—the problem of dental caries and the problem of irregularity and malocclusion of the teeth. Whatever one may think of the declaration of Charles H. Mayo in 1913 that the next great advance in preventive medicine should come from the Dental profession, at least there can be no doubt that the progress of Dental Science as such is bound up with the solution of these two problems."<sup>5</sup> The dental classic from which this quotation is taken is an outstanding example of the contribution that can be made by the medical scientist who catches a vision of the significance of the work that lies before dentistry, for there is good reason to believe that the most promising attack can be made by pooling the resources of both professions. There are already encouraging tendencies in confirmation of this view.

As a joint contribution towards the cultivation of what has been called the no-man's-land between medicine and dentistry, viz. the pathology of the teeth and oral cavity, two very promising experiments have been under way for some six or eight years. At the Universities of Yale and Rochester fellowships have been established which enable carefully selected students, mostly dental graduates, to devote themselves to research. The policy governing the two groups is not identical although the objectives are substantially the same. Shortly after the group at Yale had got under way, the dean of the Medical School summarized the enterprise as follows: "At New Haven we are trying an experiment. We have established at the present time four focal centers of research involving the structure of the teeth, the nutrition and function of the teeth, and infectious processes involving the teeth, and a clinical group that is interested in trying to ascertain the relation of the teeth to the rest of the organism. . . . The main objective is to bring the teeth back into the organism, from the standpoint of medicine."<sup>6</sup> A further objective is stated by the director of the group. He says "It is hoped that this program will help to bring out the real relationship between dentistry and medicine."<sup>7</sup>

While the dental fellows at Yale are encouraged to prepare themselves for the medical degree, Dean Whipple has proceeded along somewhat different lines at Rochester. The medical degree is not in the picture and clinical work is not engaged in by his group. They devote their whole time to laboratory research concerning the teeth. A number of the men from these research centers, men who have had a unique opportunity to study the teeth under the most enlightened medico-dental guidance, have begun to find their way into the dental schools as teachers. This augurs well for the future.

The relation of dentistry to medicine is in essence that of a specialty, whatever the educational and professional organization of the moment. Grow-

ing social pressure is likely to reveal a progressive unity of purpose and objective.

This discussion of some of the factors involved is offered with the hope that medical interest may be stimulated in what must be increasingly a common undertaking.

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#### REFERENCES.

- 1, 7. Anderson, Bert G. "Medical and Dental Relationships at Yale." *Yale J. Biol. & Med.*, 1934, 7, 51.
  2. Johnson, A. LeRoy. "A Basis for Orthodontic Diagnosis." Unpublished paper read before Southwestern Society of Orthodontists, Houston, Texas, November 1935.
  - 3, 6. Winternitz, Milton C. "Medical and Dental Education." *Clinical Medicine and Surgery*, August 1930.
  4. Keith, Sir Arthur. "Concerning Certain Structural Changes which are taking place in our Jaws and Teeth. Lectures on the Growth of the Jaws, Normal and Abnormal, in Health and Disease." Dental Board of the U. K., 1924.
  5. Brash, J. C. "The Aetiology of Irregularity and Malocclusion of the Teeth." Dental Board of the U. K., 1929.
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#### Kentville Will Erect Hospital.

Kentville, April 24.—Erection of a hospital in Kentville with from twenty-five to thirty-five bed accommodation will get underway early in June. Cost of the hospital will run between one and two hundred thousand dollars.

Dr. W. S. Blair, chairman of the Kentville Hospital Commission, states that according to decision of the annual meeting it is the intention of the commission to start operations and proceed with erection of a hospital. Dr. Blair also stated that B. Ewan Parry, Toronto architect, had been engaged as consulting engineer to formulate definite plans.

Two months ago, at the annual meeting of the Kentville Hospital Commission, it was unanimously voted that Kentville proceed with erection of a hospital on grounds owned by the Commission, which are about two hundred yards east of the Nova Scotia Sanatorium. Donations including thirty thousand dollars as a bequest of the late A. Milne Fraser, Halifax; the late George E. Calkin, Kentville; the late Mrs. Barclay Webster, Kentville and the late John F. Masters, Boston and Kentville, total around seventy thousand dollars. Condition of the Fraser bequest is that the hospital must be underway not later than 1936. Because of this clause in the bequest, the Kentville Hospital Commission feel it is necessary to take immediate steps.—*Berwick Register*, April 29.

# Chronic Iliac Pain: A Problem in Diagnosis

H. B. ATLEE.

PROBABLY no single condition causes the general, urological, and gynecological surgeon so much heart-searching as chronic right-sided iliac pain. There are so many physical factors to hold responsible, with always the strong possibility that the symptom may be neurotic, or at least inexplicable sensibly in our present knowledge of pelvi-abdominal pathology. But chronic left-sided iliac pain is an equally potent source of bewilderment to the urologist and gynecologist. It is not so much with the hope of throwing any new light on the subject as with the wish to recapitulate it in the light of his experience that the writer trots the bugaboo forth again.

Of course it is very simple, in the case of chronic right-sided pain, to call it appendicitis and remove an appendix which a kind-hearted pathologist will report on as "injected and showing evidence of chronic inflammation." Those of us who have removed a considerable number of appendices believe that even the normal will yield such description. It is my own feeling, after considerable reflection, that chronic appendicitis is the last diagnosis that should be made in a patient presenting chronic right-sided pain—and it should be made when every other possibility, including constipation and neurosis have been excluded.

In the handling of these patients with chronic iliac pain I always now rule out first of all any possibility of trouble in the genito-urinary tract. This is most important, as I learned to my sorrow several years ago. At that time a woman was admitted to my service at the V. G. with left iliac pain dating back to her pregnancy some five weeks before. The outside diagnosis was pelvic cellulitis. The patient had no temperature, she had a *normal* urine by tests microscopical and otherwise, and all that could be found in her pelvis was a slightly tender spot just to the left of the cervix; there was no induration in the neighborhood. After being treated palliatively her symptom improved and she was discharged. A month later she was admitted to another service where they had the wit to do a cystoscopic. A stone was found about an inch up the left ureter. Since that time I have had all chronic iliacs cystoscoped, no matter how normal their urine was, in which I was in any great doubt.

Having ruled out the genito-urinary tract the gynecologist naturally thinks of the tubes, and it is a fact that a large number of these women suffer from chronic tubal infection. A point to keep in mind is that a patient may have iliac pain from a tubal condition of so little pathological grossness that it cannot be felt. One is constantly finding this, and it must be remembered that what might be gross, easily-felt pathology in a thin woman with a lax abdominal wall, cannot be palpated in the stouter woman at all. But even in thin women one will find chronically-inflamed tubes so little enlarged that they are not palpable on bimanual, yet are responsible for the iliac pain as proved by cessation of the latter on their removal.

Beesly and Johnston's "Manual of Surgical Anatomy" (fourth edition by Bruce and Walmsley, 1935): Up-to-date, readable, comprehensive and well illustrated; popular for the last twenty years among the Edinburgh clinical anatomists.

Treves and Choyce' (1934) "Surgical Applied Anatomy": Well known. Although dealing with the same field as Beesly and Johnston's "Manual", the one does not replace the other. Reflects the personal experience of Treves and later editors.

McGregor's (1934) "Synopsis of Surgical Anatomy": A book chiefly for reference; very detailed and up-to-date information on the many subjects with which it deals, although it does not cover the entire field. About one-half is on the anatomy of the abnormal, e.g. congenital errors, the anatomical bases of clinical tests, the optimum attitude for stiff joints, etc. Contains a few errors of statement and in the drawings, as is to be expected in a new book.

Jamieson's (1935) "Companion to Manuals of Practical Anatomy": Contains in short compass most of the information of the usual large systematic text-book combined with full regional anatomy; a summary of embryology; details of nerve tracts; no illustrations. Extremely accurate and popular for many years with Edinburgh surgeon-anatomists.

Keith's (1933) "Human Embryology and Morphology": From the medical man's point of view, still by far the most interesting of embryology text-books.

Wright's (1934) "Applied Physiology": Details of physiology with their clinical applications; has been kept up-to-date by an edition every two years since it was first published in 1926.

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#### REFERENCES

- Bankart, A. S. B.—Manipulative Surgery, London, (1932).  
 Bonney, Victor—J. Obstet. and Gynaecol. of the Brit. Emp., 41, 669, (1934).  
 Bowen, W. P.—Applied Anatomy and Kinesiology, Philadelphia, (1934).  
 Bruce, J. and Walmsley, R.—Beesly and Johnston's Manual of Surgical Anatomy, London, (1935).  
 Colt, G. H., Ramsay, I. S. W., and Morrison, M. M. M.—Brit. Med. J., 2, 49, (1935).  
 von Dittrich, K.—Munch. Med. Woch., quoted in Brit. Med. J., 2, Epitome p. 1. (1935).  
 Farr, R. E.—Practical Local Anesthesia and its Surgical Technic, Philadelphia, (1923).  
 Fifield, L. R.—Infections of the Hand, London, (1926).  
 Jackson, J. L.—Can. Med. Ass. J., 29, 475, (1933).  
 Jamieson, E. B.—A Companion to Manuals of Practical Anatomy, London, (1935).  
 Jones, R. and Lovett, R. W.—Orthopedic Surgery, New York, (1929).  
 Keith, A.—Human Embryology and Morphology, London, (1933).  
 Lake, N. C. and Marshall, C. J.—Surgical Anatomy and Physiology, London, (1934).  
 McGregor, A. L.—A Synopsis of Surgical Anatomy, London, (1934).  
 Mackenzie, C.—The Action of Muscles, London, (1930).  
 Mainland, D.—Can. Med. Ass. J., 33, 538, (1935).  
 Treves, F. and Choyce, C. C.—Surgical Applied Anatomy, London, (1934).  
 Waggett, E. B.—Brit. Med. J., 1, 1238, (1935).  
 Wright, S.—Applied Physiology, London, (1934).  
 Wright, W. G.—Muscle Function, New York, (1928).

# "The Relation of Dentistry to Medicine"

WM. W. WOODBURY

THAT a discussion of "The Relation of Dentistry to Medicine" should be desired by a medical publication in this year of grace is a comment on the rather arresting fact that the mouth is the only portion of the human economy that has its own profession trained under a distinct educational discipline.

On this continent modern dental education had its beginning in Baltimore nearly a century ago. The story of that pioneer effort shows that the founding of a school separate from medicine was the result partly of accident and partly of deliberate design. In any case, a precedent was created that was followed elsewhere until it came to be taken for granted that although dentistry was more or less related to medicine, yet it was a thing apart. The outcome of this dual development is the essence of the present situation. Its implications concern both professions and the public as well.

That this initial distinctiveness should be maintained is not surprising when we remember that the technical concerns of an average practice foster in the dentist a diversity of interests. "His work in porcelain and precious metals gives him as much in common with metallurgists, engineers, and sculptors, as with physicians."<sup>1</sup> The demands on the dentist from the beginning have been largely mechanical. In the main he has been expected to make good the loss of tooth substance occasioned by dental caries. To meet this he has developed a number of distinctive and rather exacting techniques, for he is supposed to achieve a relatively high degree of mechanical efficiency and esthetic harmony. ". . . any criticism that fails to recognize the peculiar position and requirements of dental practice is not worthy of serious consideration. The dental profession alone is not entirely responsible for many of its limitations. . . . We have been restricted to the treating end of a sequence of conditions, the study of which has been forbidden ground to us because of certain arbitrary divisions in educational organization. . . . How many of (our critics) realize the unusual combination of faculties required of us? The dual endowment of biological interest and mechanical dexterity, so rare and yet demanded of the dentist is a qualification that finds no parallel, in like degree, in any other fields of health service."<sup>2</sup>

Although dentistry has been slow to realize the pathological implications of its field, and also some of its own activities, on the other hand the fundamental problems of oral pathology are only beginning to receive the attention from medicine that they merit. The dean of one of the leading medical schools of this continent said, not so long ago, "I went to what was considered a fairly good medical school, but had I not known that man had teeth before I went there, I certainly never would have found it out in the medical school."<sup>3</sup>

An important factor in making a diagnosis of chronic tubal inflammation is the history of some previous acute attack of clear-cut salpingitis, or, what is often more elusive, an attack of fever following a miscarriage or full-term labor. Another strong indication would be the finding of pus in the urethra, and the gonococcus in either the urethral or cervical smears. For this reason smears should always be taken of cervix and urethra where there is evidence of chronic cervicitis or Skenitis. Nor does the absence of all these rule out tubercular salpingitis. In tubercular salpingitis, however, one always gets the slight afternoon rise of temperature and usually a low leucocyte count. And then there is very often the history of either a familial taint or present or previous T. B. elsewhere in the body. The patient with tubercular salpingitis is usually in her teens, and usually has a virginal hymen—though what connection there might be is beyond the scope of my researches. But where one finds definite pelvic inflammation in the presence of a virginal hymen the chest should invariably be X-rayed for evidence of T. B. Just recently I had such a case where a virgin of 18, complaining of chronic right-sided pain and the very slightest afternoon temperature with low leucocyte count and no familial or previous history of T. B. elsewhere, had under the X-ray rather badly raddled lungs which confirmed one's earlier suspicion.

The cervix is a commonly overlooked source of chronic iliac pain. A deep laceration that has never healed cleanly, or a neglected cervicitis with erosion will both cause this symptom. I make a fairly constant point of cauterizing or repairing these cervixes and sending the patient home for three months to see what effect the cleaning up has had on the pain. One should not allow less than three months for this as it takes about six weeks for a thorough cauterization or a repair to completely epithelialize, and another six weeks for the induration in the para-cervical tissues—which is the cause of the pelvic pain—to disappear.

Another commonly overlooked source of chronic iliac pain is ectopic gestation. We get it fixed in our minds as students that ectopic gestation is an acute condition—the fainting, bloodless patient with the rigid, doughy abdomen, the low hemoglobin and the acutely tender tube felt p. v. Most of the ectopics I see are decidedly not of that brand, and a good number of them have had symptoms for several weeks. Only recently I operated on such a patient who had had pain in her side for over two months. The pain was never at any time severe and although she had been bleeding a little p. v. every day for over a month her hemoglobin was 75%—which is good hemoglobin for a woman in Nova Scotia in March. I make a point of suspecting all chronic iliac pain associated with more or less vaginal bleeding every day as being ectopic gestation.

Sometimes a retroverted uterus will cause chronic iliac pain, but I come to such a conclusion only after much cogitation, and when there is some other condition, such as tender prolapsed ovaries lying beneath the uterus in the Pouch of Douglas, to justify me in advising a suspension. I would certainly not recommend the operation for uncomplicated retroversion.

What role may the ovaries play in the production of pelvic pain? Sometimes a small ovarian cyst—too small to be noticed abdominally—will get repeated partial twists of its pedicle. I have encountered this several times, but in each case the bimanual examination showed the tumor up quite clearly. Apart from that I doubt if the ovaries play any great part at all in the production of chronic iliac pain. It used to be taught that the so-called "small



cystic ovary" and the follicular cyst of the ovary produced pain. I don't think such teaching is any longer tenable. Nor do I think it is anything short of criminal to remove an ovary just because one has opened the abdomen looking for a cause of iliac pain and can find nothing else to account for it. If the ovary is concerned in so-called "pelvic neuralgia"—and no one has yet proved that it is—it should not be removed: there is a better operation or this condition—pre-sacral sympathectomy. "Pelvic neuralgia" is a fairly common condition. Just how much of it is neurosis and how much based on physical pathology, I do not know. But the findings are fairly distinctive. The patient complains of pain in one or both iliac regions, she is tender on bimanual in the regions where the pain is felt, and is often tender on bimanual over the bladder: in fact, she may be tender in all the vaginal fornices. On opening the abdomen the pelvic organs are normal, or there may be a small follicular cyst of one of the ovaries. I have done pre-sacral sympathectomies on over thirty such cases. Some of these have remained free from symptoms for as long as a year, others got no relief at all. A complete follow-up study of these cases for a full year is intended as soon as I get a sufficient number. A limited follow up covering from three to six months following the operation showed a cure from it in about 70% of the cases. I think then that we can put "pelvic neuralgia"—whatever it is—in the category of fairly common causes of chronic iliac pain.

In women at the time of the menopause one should not forget papilliferous ovarian cysts as a cause of chronic iliac pain. At this time of life a woman tends to put on quite a pad of fat about the lower abdomen which may disguise from her the presence of a cyst of considerable size. I am constantly amazed at the size of pelvic tumor the woman in the late forties will harbour without recognition. The papilliferous cystadenoma of the ovary is so prone to cause pain because of the adhesions it forms locally, and in my experience pain is usually a symptom of this type of tumor.

Fibroid tumors may be a cause of iliac pain because of the fact that in about 15% of cases they are associated with chronic salpingitis. Otherwise fibroids, unless submucous and causing expulsive dysmenorrhea, are, on the whole, painless growths.

And finally, as causes of chronic iliac pain one should not forget either the sigmoid or the caecum. Constipation, of course, is a notorious cause of both right and left-sided iliac pain. But other conditions of these organs may likewise cause such pain. I have operated on two women for left-sided iliac pain, one of whom had carcinoma, and the other diverticulitis of the sigmoid. Another girl, operated on for tubercular salpingitis, was found to have tuberculosis of the caecum.

# The Prevention of Venereal Diseases in Sweden\*

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*Commissioner of Health, Stockholm, Sweden*

(From American Journal of Public Health, April, 1936.)

AFTER a thorough investigation which was carried on over a very long period of time, a law was passed in Sweden by action of Parliament in 1918 concerning methods to be employed for the prevention of venereal diseases. The intent of this law was to employ the same methods for the prevention of venereal diseases as were used for other communicable diseases.

I shall now give a short account of the requirements of the law against venereal diseases and the procedures for enforcing it, and show curves demonstrating the variations in the frequency of venereal diseases.

The law contains the following principal points:

1. Every person suffering from venereal disease must submit to treatment by a physician and must follow his directions.
2. Every such person has the right, irrespective of the size of his income, to obtain free medical treatment and medicine, in case he is not being treated by a private physician. This includes free injections, free serologic examinations, as well as free certificates required by the public health authorities as to complete recovery or continued treatment. Hospitalization in a special general ward is also furnished free of charge.
3. Every physician treating a new case of venereal disease must try to obtain information about the source of infection.
4. Against patients, who do not properly follow up their treatment, and against individuals identified as the source of infection but unwilling to come to treatment, certain compulsory measures may be taken.
5. A person who knows that he or she suffers from venereal disease and who by carelessness causes its transmission, is subject to punishment of a severity up to forced labor.
6. Every marriage partner prior to obtaining a marriage license has to sign a statement certifying his or her freedom from venereal disease in a contagious stage.
7. The local public health authorities must publish information about the existence of the clinics for the treatment of venereal diseases.

The medical control of prostitution was simultaneously abolished. Opinions varied widely at one time among the physicians as to the expediency of abolishing this control but in the vagrancy law there is a good weapon available to the police for dealing with this class of women. The term vagrant as used in the legislation covers not only vagabonds in the strict sense of the word but also persons with fixed abode known to lead a harmful life. The punishment prescribed for vagrancy consists in confinement in a workhouse.

\* Read before the Health Officers Section of the American Public Health Association at the Sixty-fourth Annual Meeting in Milwaukee, Wis., October 7, 1935.

Sentence of this is passed by the provincial governor after a preliminary warning.

The law defines venereal diseases as syphilis, gonorrhoea, and venereal ulcer. Treatment is required during the infectious stage. By this is meant as long as infectious symptoms are present or as long as there is any possible danger of the infection being transmitted. This is applied in such a way that, for instance, a person infected with syphilis is entitled to free medical care for 3 years from the beginning of treatment. Pregnant women infected with syphilis at any time earlier likewise have the right to continue treatment to its completion.

Examination and treatment free of charge are furnished by the rural district physicians and by the health officers of the cities. In cities of more than 20,000 inhabitants there must be a special clinic with different receiving hours for men and women. If possible, women doctors are employed at the clinics for women. Special training is required of all these physicians.

The salaries of the physicians, the cost of medicine, and the serologic tests are paid for by the Swedish Government while the local communities themselves furnish the space for the clinics, the non-medical personnel required and the cost of hospital care. The physicians at the clinics have fixed salaries; the other physicians are to be reimbursed from the central government. If the work is on a large scale, fees are reduced along certain lines. The salaries of the physicians at the clinics are revised annually with regard to whether the work has increased or decreased.

A physician who has made the diagnosis of venereal disease in a person is required to inform the patient of the nature of his infection and the danger of transmitting it to others. He must also give the patient a pamphlet with printed directions as to what measures he must take in order to prevent spreading the disease. The patient is also informed that it is forbidden by law to marry under these conditions or to subject any other person to infection. The stipulations regarding punishment are stated in the directions. The sick person is required to acknowledge in writing that he has received these directions. This point is especially important, as in this way the patient is made to understand that the State has control over his conduct and that carelessness cannot subsequently be excused on the plea of ignorance of the law. These written acknowledgments may be and have been used as evidence in court.

The physician is required to care for the sick person during the whole period of sickness or to report to the physician in charge of the health department if the patient has stopped treatment without furnishing proof that he is being treated by another physician.

It is the duty of the physician who first discovers venereal disease in a patient to try to trace the identity of the individual responsible for transmitting the infection.

The health officer in each city or province is the supervisor of this work. The report to the health officer of a new case contains the date of birth of the patient and the community of which he is a resident, but not his name. The report also contains the source of infection, if the patient has been able or willing to reveal the same, and in this case the name and address of the source is given. As a protection against blackmail the physician has to use his judgment as to the truthfulness of the patient's statement. In case the information is sufficiently detailed to locate the source of infection, a letter

in a plain envelope is sent to this person. The number of the post office box is, however, stamped on the envelope so that the letter will be returned if the addressee is not located. This letter contains a printed order for said person to submit to examination and to deliver a certificate that either he is free from venereal disease, or is under treatment. The letter plainly states that the person may choose his or her own physician, but at the same time a list is enclosed stating which physicians or clinics will render free examinations and treatment. If the letter is returned or if no statement is received from the addressee within 4 days, a registered letter is sent. If this is returned or no statement received within 6 days the health officer makes out a notification to the police to bring the person for examination. The suspected source of infection is visited by the police or a police nurse and is then given one or two days to go to the clinic voluntarily, unaccompanied by the police.

The patient or "the new case," after the inquiries made at the first visit to the physician, is unmolested by the health authorities if he continues his treatment regularly. If he is irregular or discontinues treatment without a properly arranged transfer to another doctor, the treating physician has to reveal his name to the health officer and the procedure just described in connection with the search for the source of infection is applied. In this case the police order contains a notification that the person in question must be hospitalized. It is possible for him to avoid hospitalization if it is thought that the patient really will continue treatment regularly. However, if hospitalization is ordered, the patient must submit to hospital treatment until released by the health officer.

In Stockholm girls under 18 years of age are always hospitalized and not treated at the free clinics, in order to protect them from undesirable contact with older female patients in the clinics. In all matters pertaining to the investigation of patients and reporting the cases secrecy on the part of the doctors and nurses is required.

The wisdom of the venereal disease legislation at first was rather generally doubted by physicians, but in actual practice the difficulties have not been very great. The success of the law depends upon several factors. No single factor is more important than the cooperation of the doctors. Here it is a pleasure to report the loyalty of the profession. If cases exist which are not reported they seem to be cases of little importance in the spreading of the disease. No foci of social evil have ever been known to escape.

In retrospect one might admit that the doctors feared that the law would ruin their private practice. This of course did not prove to be the case. On the contrary the patients now are compelled to get complete treatment and they usually do their best to do so under complete protection against official interference. Patients who can pay the doctor, in general, are treated by private physicians in order to avoid the publicity of taking treatment at a clinic. The free clinics, at the same time that they erected a protection against excessively expensive private treatment, also created a number of salaried positions for specialists in venereal disease. The considerable decline in venereal disease which has resulted has of course influenced the income of the doctor, just as the disappearance of typhoid fever deprived the doctor of the former generation of the sum he used to set aside for his coal bill.

To most patients the shock of the diagnosis and being confronted with the responsibility which marks the procedure of the first visit to the doctor, office to make the patients follow the directions. Only against more or less

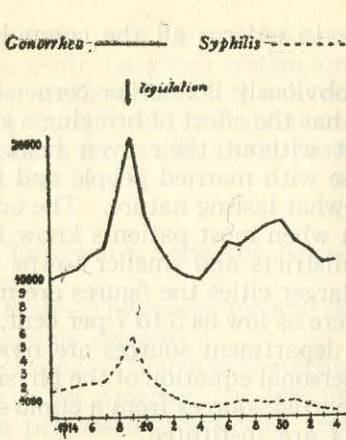


CHART I—SYPHILIS AND GONORRHEA IN SWEDEN—NUMBER OF NEW CASES

CHART I—Cases of venereal disease have been legally reportable since 1913, but in the beginning the reporting was probably not complete.

After a sharp increase during the war, the law was put into action and the decrease was promptly made apparent during the first years thereafter. During 1934, 11,500 new cases of gonorrhoea and 431 new cases of syphilis were reported.

Gonorrhoea has decreased to one-half its maximum. Syphilis has decreased to less than one-tenth what it was in 1919. There

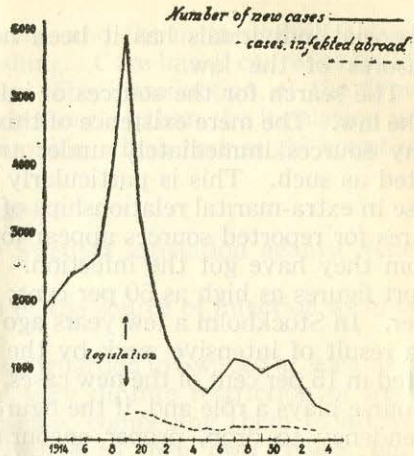


CHART II—SYPHILIS IN SWEDEN

were in 1919, 3,000 new cases of venereal ulcer; in the last year only about 100. A great part of these were sailors, infected aboard.

CHART II—This gives the figures for syphilis in Sweden: 6,000 new cases in 1919, 431 in 1934. During the last years about a fourth of the new cases were infected abroad. Of 431 new cases, 110 occurred in Stockholm, 212 in other cities containing a total population of 1,500,000 inhabitants, and 109 cases were in rural districts containing a population of 4,000,000 inhabitants.

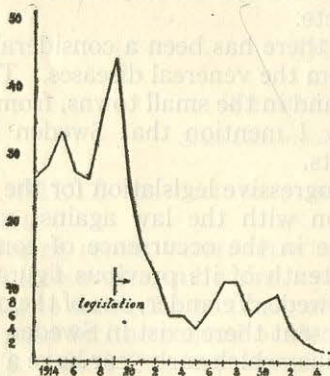


CHART III—SYPHILIS IN STOCKHOLM NUMBER OF NEW CASES IN 10,000

CHART III—This shows the number of new cases of syphilis in Stockholm per 10,000 population. In 1919 there were about 44 per 10,000 and now there is a rate which scarcely reaches 2 new cases in 10,000 people.

CHART IV—This gives a comparison of the prevalence of syphilis in the three capitals: Stockholm, Oslo, and Copenhagen.

In Norway and in Denmark there has been provision for free treatment for the poor for

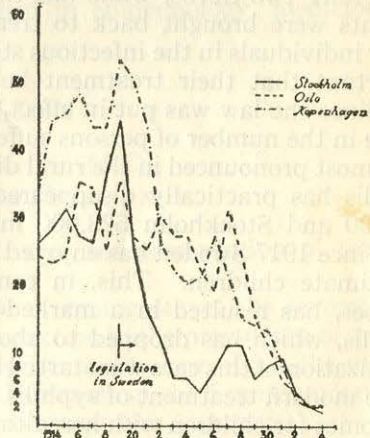


CHART IV—SYPHILIS IN STOCKHOLM, OSLO AND COPENHAGEN NUMBER OF NEW CASES IN 10,000

many years, and during the last years the health authorities in Oslo and Copenhagen have tried to search for the sources of infection in about the same way as we have done in Sweden.

Oslo and Copenhagen still have rates which are 50 per cent higher than those of Stockholm where the drop was earlier and more apparent.

anti-social individuals has it been necessary to enforce all the compulsory measures of the law.

The search for the sources of infection obviously is another cornerstone of the law. The mere existence of this clause has the effect of bringing a great many sources immediately under treatment without their even being reported as such. This is particularly the case with married people and with those in extra-marital relationships of a somewhat lasting nature. The actual figures for reported sources appear low, even when most patients know from whom they have got the infection. Rural districts and smaller towns may report figures as high as 50 per cent; in the larger cities the figures are much lower. In Stockholm a few years ago they were as low as 3 to 7 per cent, but as a result of intensive work by the health department sources are now reported in 15 per cent of the new cases. The personal equation of the physician of course plays a rôle and, if the figures of reported sources from a clinic show a tendency to drop, proper encouragements are instituted.

It is possible to locate the majority of the reported sources. Among those with whom contact has thus been established very few prove to be erroneously reported; others are able to prove themselves non-infectious—they have had time for treatment while the procedures of reporting and search have been going on. As many as 80 per cent of the reported sources have come under treatment in the city of Gotenbourg and as many as 50 per cent in Stockholm. For the whole country in the past year 1,072 sources of infection have come under treatment. This figure for sources is higher than during previous years.

In the clinics, where the less stable part of the patients are found, every effort, by such means as filing cards, is made to keep permanent track of the patients. The follow-up of irregular ones locates and brings back to treatment fully two-thirds, while one-third cannot be located. In this way 800 patients were brought back to treatment. This number probably includes many individuals in the infectious stage whose irresponsibility makes it doubly important that their treatment be complete.

Since the law was put in effect in 1919 there has been a considerable decrease in the number of persons suffering from the venereal diseases. This has been most pronounced in the rural districts and in the small towns, from which syphilis has practically disappeared. May I mention that Sweden has 6,000,000 and Stockholm 523,000 inhabitants.

Since 1917 Sweden has enjoyed very progressive legislation for the care of illegitimate children. This, in combination with the law against venereal diseases, has resulted in a marked decrease in the occurrence of congenital syphilis, which has dropped to about one-tenth of its previous figure. The organization of this care was started by the Swede, Velandér, one of the pioneers in the modern treatment of syphilis. At present there exist in Sweden 3 nursing homes for children with hereditary syphilis, which each year have a greater number of vacant places. The babies are kept in these homes for 3 years and sometimes longer. A follow-up of 140 former patients who could be located, showed that 118 had no defect at all, either mental or physical, 4 to 25 years after discharge from the homes. Seventy-four had been kept under observation more than 10 years.

Though the law against venereal diseases has been in operation only since 1919, there is already a marked decrease in the occurrence of syphilis of the internal organs. A gumma of the liver is practically never seen; syphilis

of the heart and aorta is becoming a rarity; and the meta-syphilitic diseases of the central nervous system are diminishing. Care has of course to be taken in the explanation of this development. The introduction of the Wassermann reaction and of arsphenamin a decade earlier than the legislation under discussion are factors in the history of syphilis, which here might count more than our law.

#### Summary

Two points form the basis for the Swedish legislation against venereal diseases:

*First*—The search for and detection of the source of infection as in other contagious diseases.

*Second*—Though personal liberty is safeguarded in Sweden at least as carefully as in America, the law imposes a very definite restriction of freedom upon persons afflicted with venereal disease, compelling them to accept an amount of medical treatment, not according to their own choice, but according to the decision of responsible physicians. Upon individuals, under such control and to whom complete medical facilities for treatment are available at no cost, the nation further imposes the responsibility not to propagate the disease. For wilful neglect of this responsibility, punishment up to the severity of forced labor can be imposed.

The results correspond to the ability of medical science of today in the treatment of these diseases: for syphilis the results are even better than could have been hoped for, but for gonorrhoea decidedly poorer. It is believed that considerable further decrease in the frequency of gonorrhoea might be obtained by better methods for treatment in order to get the patient non-infectious in a shorter time and by procedures of individual prophylaxis.

Thus we have successfully applied to the combating of the venereal diseases the experience and principles gained in epidemiology, medicine, and public health administration.

### DISCUSSION

THOMAS PARRAN, JR., M.D.

*State Commissioner of Health, Albany, N. Y.*

**D**R. RIETZ has been very conservative in his presentation of this subject.

During recent years, reports have been coming out of the several Scandinavian countries, indicating a marked reduction in the prevalence of syphilis. In order to check the accuracy of these reports and to investigate the methods being used for the control of the venereal diseases in the Scandinavian countries, I visited Sweden, Denmark, and Norway this summer.

Without doubt, syphilis has become a rare disease in Sweden and in the other Scandinavian countries. We were convinced that notification of early cases of syphilis is relatively complete and accurate. The continued high recorded prevalence of gonorrhoea, among other facts, supports this conclusion. Dr. Rietz has told you that only 431 cases of syphilis were recorded in Sweden last year. The population of Sweden is more than 6,000,000—approximately the same as upstate New York. Last year, there occurred in upstate New York more than 11,000 cases of syphilis. In similar measure, syphilis has

become a rare disease also in Denmark and Norway. In each of these countries, there are two basic principles underlying the control efforts: *first*, every infected person must take treatment; *second*, treatment without cost and of a good quality is made freely available.

The cold statistics are corroborated on every hand. Professors in the medical schools have difficulty in finding a sufficient number of early cases of syphilis to demonstrate to their pupils. In the Rigs Hospital in Copenhagen, the dean of the medical faculty and professor of obstetrics showed us his records—nearly 2,000 deliveries each year, of which 60 per cent are of unmarried mothers. During the past 3 years the number of cases of syphilis, as shown by routine Wassermann tests and careful histories, has varied from 30 to 35 per year, and the number of cases of congenital syphilis from 2 to 5. In the Wehlander homes for congenital syphilitics are many empty beds.

In Denmark and Sweden and also in Great Britain, the control of the venereal diseases is primarily a responsibility of the central government. No other health activity is the subject of such centralized responsibility. This indicates, I think, the importance which is attached to this problem.

During recent months, health officers in this country have been encouraged to hope that one or another method recently proposed for the prevention or cure of poliomyelitis would prove of value. Each of these methods has attracted national attention. The newspapers have described them in first page stories.

Splendid as it would be to have weapons with which to eradicate poliomyelitis, the effect upon the public health of this country would be infinitesimal as compared with the control of syphilis as has already been done in Sweden.

Dr. Rietz has brought us a gripping story of actual accomplishment. Syphilis in Sweden is no longer a major health problem. The methods by which this result has been accomplished can be applied to the United States. Dr. Rietz has described to us one of the most outstanding public health accomplishments of our generation; truly, it is a modern miracle in medicine.

In closing, may I paraphrase a statement of Dr. Stokes: How long shall we health officers in the United States concern ourselves only with the minor plagues while this major plague of syphilis continues unabated?

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### DOCTOR WANTED

The Secretary has received a letter from Mr. M. A. Macdonald of Cape North, C. B., stating that a Doctor is wanted for an unopened country practice in North Victoria. Further particulars may be obtained from Mr. Macdonald, Dr. M. G. Macleod of Whycomagh or Dr. H. A. Grant of Big Bras d'Or.



# UTOPIA

E. C. MENZIES, M.D.,

The Provincial Hospital, Saint John, N. B.

I HAVE often thought that the best way to raise the standard of medicine would be to shorten and cheapen the University course, while at the same time increasing the amount and quality of the work required from students.

There is no doubt that the present day effort to raise standards by constantly lengthening an already long and expensive course, has narrowed the field from which the doctors of the future will be selected.

Broadly speaking the doctors of tomorrow are coming from a limited class, viz; those young people who have families with money enough to put them through college. I am not one of those who deny possession of ability to the more leisured classes, in fact there is much in the assertion that a young man who numbers in his immediate ancestry people who have had the capacity to amass a competence, is very likely to inherit some of the qualities which made them successful. Neither am I unconscious of the delightful character of our modern medical class; they are filled with young people of good family and pleasing manners, many of them financially independent, able and willing to spend years in post-graduate work and then, fully trained, to take poorly remunerated teaching positions in our hospitals and universities and do the never ending unpaid work that our public ward system makes necessary.

In the second place I also admit that training and long experience are vital in medicine, native brilliance and hard work may, in some other professions, overcome lack of training, but never in medicine, for the simple reason that we are not only a science but also a craft.

Admitting however all that is contained in the last two paragraphs, my statement that we are narrowing markedly the field from which we select our students still remains true. It is still more true that training, be it ever so thorough and long, yields in importance to certain other fundamentals. I would briefly list these as follows:—

1st.—The degree of intellectual capacity. “Brains” to my mind are essential and training is at best a very poor substitute.

2nd.—Emotional stability—This term covers many qualities which we all recognize in the true doctor, above all it implies the capacity for hard work.

3rd.—Knowledge of life.—Every doctor must know life. It is perhaps in this last qualification that one finds our present day generation of students and internes most lacking. While they may speak the language of and understand many of the private patients, they have not the remotest idea of what is going on in the minds of the great majority of sick people. Not only has their previous sheltered existence given them no opportunity to understand life as it is experienced by nine out of ten of the patients they will have to treat, it has also rendered them quite unconscious of the fact that such knowledge is necessary. You hear constantly such expressions as “I must take a look at that pneumonia in ward 8” or that “Appendix”

in 7. The conception that they are going to see a *human being* who happens to be suffering from some illness never enters their minds and if it is drawn to their attention, their lack of experience of life renders them quite incapable of recognizing its significance. Indeed I have often felt that this lack is so marked among our modern students as to call for a special effort on the part of the University to overcome it, in other words, somebody should make an effort to bring home to these young people just what the necessity of making a living means to most of their patients.

Quite undeterred by the realization that I have never administered a medical faculty and fully conscious of the fact that I am most certainly unqualified to do so, I am going to outline a quite Utopian plan for raising the standard of medicine.

1st.—Without reducing materially the amount of work demanded, shorten and cheapen the course. This will increase the reservoir from which prospective students can be selected. Then with the aid of the departments of philosophy, psychology and possibly psychiatry, select the incoming class for the qualities I have mentioned. No true psychologist should object to this duty.

I know that intelligence quotients are now taken of all students and that this quality is further estimated by giving weight to the student's previous scholastic record; but the I. Q. is not everything and the students academic degrees may simply be an indication of the fact that his family has been able to keep him continually in college.

Once the class is formed on this basis, the fact that a large amount of work is required will bring the law of natural selection into play. Not only brains but also stability will be necessary if the student is to survive. Not only will natural selection operate among the students, it will also operate among the teachers. The dull prosy rule of thumb lecturer, whose only claim to position may lie in the number of years of training he has had, will have to retire in favor of the man, who, in addition to training, has the faculty of being able to grasp his subject as a whole and thus teach principles rather than a dull succession of facts and medical traditions, facts and traditions which indeed the march of science is continually altering.

The methods of examination will change, in that it will be necessary to constantly estimate the student as well as his knowledge.

Such a system would ensure two things, first, It would allow splendid material to enter medicine where today this same material is finding other outlets for its energy. It might indeed aid in supplementing the fast diminishing supply of country and family doctors who are as essential to the profession as they are to the community.

Second—It will ensure that the part of the class that is financially able to spend years in travelling and study, will have the essential underlying qualities to make such training of fullest value both to them, the community and the profession.

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It is to be distinctly understood that the Editors of this Journal do not necessarily subscribe to the views of its contributors, except those which may be expressed in this section.

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## THE CONTROL OF VENEREAL DISEASE

WE have published in this edition an article by Dr. Einar Rietz, Commissioner of Health of Stockholm, Sweden, dealing with the methods used in the control of venereal disease in that country. His paper was read before the Health Officers' Section of the American Public Health Association at the 1935 meeting held at Milwaukee, Wisconsin. The discussion of Dr. Thomas Parran, former Commissioner of Health for the State of New York, and at present Surgeon-General of the United States Public Health Service, is also included.

Dr. Rietz's paper is undoubtedly one of the most encouraging reports ever published on the subject of venereal disease control, and that it has been corroborated by such a well known American public health authority as Surgeon-General Parran, gives it additional importance in our eyes.

The incidence of syphilis in Sweden today is one-tenth of what it was in 1919; that of gonorrhoea, one-half—a truly remarkable achievement. Those who find it difficult to accept this statement should remember that the Swedish reports have been checked carefully by competent American public health authorities and found correct. How has this remarkable decrease in the incidence of venereal disease been effected?

First, we think, by the adoption of a sensible and practical attitude toward the venereal diseases. They have been regarded in Sweden as communicable diseases, and the usual methods of dealing with other communicable disease have been applied to venereal disease. Quarantine has been enforced by making it a crime, subject to severe penalty, to knowingly transmit the disease. As in other communicable diseases treatment must be carried out as long as the condition is infectious. And yet there has been very little interference with the individual's right of privacy. All cases must be reported, but this is done by number and not by name. Although treatment is compulsory the patient has the choice of attending a public clinic or going to a private physician. Only when the patient refuses to take treatment, or discontinues treatment during the infectious stage, does the State step in, and this in a most discreet manner. The public patients have given the most

trouble in Sweden by discontinuing treatment too early. But even then, through careful checking and by the persistent efforts of the visiting nurses, two-thirds of the public cases have completed treatment.

Another important measure in the control of venereal disease in Sweden has been the identification of the source of infection. This has been done in private and at the public clinics by the physicians. This again is in keeping with our general attitude toward communicable disease. If we meet with a case of typhoid fever, our first thoughts are "where did the patient become infected?" So also with diphtheria or scarlet fever. Why not with syphilis or gonorrhoea? Is it a logical thing for us to continue indefinitely our free clinics for the treatment of venereal disease, and yet pay no attention to the sources that make these clinics necessary? That this is a practical measure is shown in Dr. Rietz's report, which states that in the City of Gotenbourg, 80% of the sources have been brought under treatment, and in Stockholm as many as 50%.

Sweden has done a good job of venereal control. In fact, syphilis is about as rare in Sweden as typhoid in Nova Scotia. The Medical Schools have not enough new cases to teach from, and syphilitic lesions of the internal organs are rarely seen. Late syphilitic manifestations of the nervous system are also decreasing.

How do we in Nova Scotia compare in the matter of venereal disease control? It would be difficult to make a fair comparison of morbidity. Most would agree, however, that we have many more cases of syphilis per thousand of population than exist in Sweden. We cannot accuse our Provincial Government of remaining idle about the situation. The policy of the Department of Health in regard to venereal disease control is in keeping with modern public health practice. The clinics at Halifax and at other points throughout the Province are efficiently staffed and are well attended. And these clinics have been maintained by our Provincial Government, although the Federal Government, under the guise of economy, has long since discontinued its provincial grants for venereal control.

Could we, however, go a step further? Would it be possible in Nova Scotia to require compulsory treatment of venereal disease? And how would our people react to a law making it a crime, carrying with it a severe penalty, to knowingly transmit venereal disease?

It is not for any one to answer. We have had several lively discussions in the BULLETIN on subjects of less importance, than the control of venereal disease. Birth control had its day, rapidly followed by the sterilization of the unfit. The control of venereal disease is one of the most important public health activities today. Will the scribes take up their pens again?

H. G. G.

#### MEDICAL EDUCATION

AT the 1936 Convocation of Dalhousie University on May 12th there were twenty-six Doctors of Medicine who were handed their diplomas. These treasured parchments represent five years, at least, of strenuous professional study and much sacrifice of ordinary material enjoyments, to say nothing of financial considerations.

The medical graduate of the present day is, perforce, a well educated person. The Medical curriculum in Canada now embraces many more sub-

jects than it did thirty or even twenty years ago. When some of the oldest members of the profession in Nova Scotia took their medical course a moderate knowledge of isolated facts in general Chemistry and human Physiology, a memorized knowledge of human Anatomy and of *Materia Medica*, and a more or less familiarity with the general principles of Obstetrics enabled the student to learn the practice of the art of Medicine and Surgery, and to satisfy the requirements of his examiners. Today, the problems which confront the clinician in Medicine and Surgery compel him, apart from the strictly practical aspect of the Profession, to have a good and working knowledge of Chemistry (physical and physiological), of general Biology, of Biochemistry, Pathology, Physiology, Embryology, Pharmacology, Histology and Anatomy. Also as many medical students today arm themselves with a B. A. or a B. Sc. degree before embarking on the medical sea, we can easily realize the capacity for scientific work in his chosen profession the M. D. possesses. For Medicine today is applied science: unfortunately, it is only in connection with a modern and well equipped hospital that this work can be satisfactorily performed. Yet the new methods of clinical study—data from the blood, the spinal fluid, the exudates, the sputa, and the urine—enable even country doctors to recognize disease much more readily than heretofore. Moreover, the physician who has not a practical knowledge of these fundamental matters cannot clearly understand the methods of others engaged in scientific investigation, nor can he rationally utilize the discovery of others in his work.

Once more let us say that every medical practitioner should realize today that to enable him to retain the theoretical knowledge gained during his College career, to obtain the most effective benefit therefrom in its practical application, and to hold his place in the march of Medical progress it is highly advisable—yea necessary—that he should become a member of a live Medical Society and to take an active part in its proceedings. If there is not one in his neighborhood let him establish one instanter, and have monthly reports of its activities sent to the BULLETIN which is always eager to obtain for publication fresh material from local sources.

M. D. M.

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## THE ANNUAL MEETING of the MEDICAL SOCIETY OF NOVA SCOTIA

Will be held in co-operation with The Dalhousie Medical Faculty Annual Refresher Course, at Halifax, August 31st, to September 4th, inclusive. An excellent scientific programme has been arranged and the subject of Federation with the Canadian Medical Association will be decided at this meeting. Make your plans now to attend. The programme will be published in the next edition.

## CASE REPORTS

### "HODGKIN'S DISEASE."

MARRIED woman, age 45 years, weight 160 lbs., one child age fifteen. In March, 1931, she developed an enlarged of cervical gland on left side of neck. Other enlarged glands soon made their appearance in the same region one above the other. In one month's time more enlarged glands began to appear in left axilla extending up under pectoral muscles to clavicle. Glands were discreet and not adherent to surrounding tissue. They came in groups. This patient was passing through her menopause, alternately skipping her monthly period and flowing at irregular intervals, sometimes profusely. She was showing signs of anaemia, loss of strength, and loss of weight, appetite poor, temperature variable, at times running up to 100 in P.M.; bowels slightly constipated, no sign of pathology in lungs; spleen and liver not enlarged; blood picture within normal limits. The question was, is this tuberculous adenitis, lympho-sarcoma, lymphatic leukaemia, or Hodgkin's disease? There was no sign of any tuberculous in the rest of the body, and the history did not suggest tuberculosis. Glands did not caseate or break down. Did not make tuberculin test, and did not dissect a gland out for microscopic examinations. In lympho-sarcoma the gland becomes adherent to its capsule and extends to surrounding tissues, metastases extend to many other forms of tissue other than lymph tissue, in lymphatic leukaemia one finds generally a great increase in the white blood cells, which we have not got here, although in rare cases this might not be so. In Hodgkin's disease the glands are discreet, and do not adhere to the capsule. Early cases do not always show much change in blood picture. Metastases occur only in other lymph tissues.

With the advice of Dr. J. G. MacDougall and Dr. Stephen Johnston of Halifax this patient was given deep electrical therapy over all areas where enlarged glands could be felt. This was repeated every three months. Much improvement was noted after each treatment. Glands would gradually shrink and in some cases disappear. Before the three months would be up more glands would appear. The right side of the neck became involved and the right axilla. Next appeared nodules in the abdomen which we judged to be enlarged glands in the mesentery. After each treatment patient felt tired and exhausted for a day or so, but soon picked up and felt better. During all this period patient was on some form of iron and copper, and much of the time various forms of liver and ventriquin. After four years of this treatment patient began to show some real improvement. Menopause was completed and she began to put on considerable weight, getting back almost to normal. Haemoglobin kept around 80%. Last summer the electric treatments were cut down, and once suspended for six months. Her last electric treatment was last August. In February of this year she began to lose weight again, and anaemia began to increase. Temperature started up and I thought at first that she had developed influenza. She was coughing and raising some mucus. However, this persisted and on examination of her abdomen I discovered her spleen much enlarged, extending half way to symphysis pubis and over to median line. Liver could also be felt below the costal margin two

inches. Blood showed red blood cells down to 3,310,000 per c.m.; haemoglobin 45%; colour index .7; white cell count 3,050 per c.m. Red cells showed marked achromia, microcytosis, poecilocytosis, and a little polychromatophilia. No nucleated red cells seen. White cells—no abnormal varieties seen. Differential count—Polymorphs—43.5%: Lymphocytes—50.5%: Large mononuclears—5.5%: Eosinophiles—.5%: Basophiles—0.0%; i.e. secondary anaemia associated with a relative lymphocytosis and some leucopaenia. Patient is in bed running a temperature, 100°F. to 101½°F., every afternoon and evening; losing weight rapidly, and feeling very weak; appetite fair; night sweats, frequent and profuse. Am now keeping her on arsenic, Fowler's solution, ascending and decreasing doses. Drs. MacDougall and Johnston saw her in March of this year in Halifax and decided against giving her any further deep electrical treatment on account of the blood picture, fearing that it might aggravate the picture. It appears that this might be the terminal stage of a Hodgkin's disease extending over a much longer period than this disease generally runs. At no time have I been able to detect any enlarged glands in either groin. X-rays have failed to reveal any in the mediastinum even as late as last March when last pictures were taken.

W. R. DICKIE,  
Digby, N. S.

There are probably no pathological conditions which play a greater role in every day life than do those generally referred to as "Rheumatic Affections".

Muscular Rheumatism, Sciatica, Lumbago, Neuritis, Arthritis, are the cause of a tremendous amount of disability in all classes of society.

Such conditions require heat as part of the routine treatment, and there is no better way of applying it locally than through the medium of Antiphlogistine, which maintains its heat and may be left applied for hours.

Antiphlogistine helps to resolve the inflammatory deposits, to reduce congestion in the deeper parts, to ease the pain and to improve the range of movement.

#### **The Summer-Time Use of Mead's Oleum Percomorphum.**

During the hot weather, when fat tolerance is lowest, many physicians have found it a successful practice to transfer cod liver oil patients to Mead's Oleum Percomorphum.

Due to its negligible oil content and its small dosage, this product does not upset the digestion, so that even the most squeamish patient can "stomach" it without protest.

There are at least two facts that strongly indicate the reasonableness of the above suggestion: (1) In prematures, to whom cod liver oil cannot be given in sufficient dosage without serious digestive upset, Mead's Oleum Percomorphum is the anti-ricketic agent of choice. (2) In Florida, Arizona and New Mexico, where an unusually high percentage of sunshine prevails at all seasons, Mead's Oleum Percomorphum continues increasingly in demand, as physicians realize that sunshine alone does not always prevent or cure rickets.

Mead Johnson & Company, Evansville, Indiana, invite you to send for samples of Mead's Oleum Percomorphum for clinical use during the summer months to replace cod liver oil.

## Society Meetings

### COLCHESTER-EAST HANTS MEDICAL SOCIETY.

THE annual meeting of the Colchester-East Hants Medical Society was held Tuesday evening, May 12, at the Scotia Hotel, Truro. The meeting was presided over by Dr. W. R. Dunbar of Truro. There was a full attendance. The scientific programme included two visitors from Halifax, Dr. S. R. Johnston, radiologist of the Victoria General Hospital, who spoke on bone conditions, and Dr. G. A. Winfield who gave a paper dealing with diagnostic points in urologic conditions. The other scientific paper was presented by Dr. H. V. Kent of Truro who gave an excellent paper on the fundamental points in the diagnosis of pulmonary tuberculosis. The business of the Society was chiefly concerned with the proposed federation of the Medical Society of Nova Scotia with the Canadian Medical Association.

Following this discussion a resolution was passed, although not unanimous, to the effect "That the Colchester-East Hants Medical Society approve of the Medical Society of Nova Scotia becoming a Branch of the C. M. A." The following points were stressed: 1. That this should not be hurried through necessarily this year: 2. That if fewer members joined the combined Medical Society of Nova Scotia and the C. M. A. than at present belong to the C. M. A. the C. M. A. would not be strengthened by this federation: 3. That the combined fee be \$15.00: 4. That a more direct canvass be made of all the Nova Scotia doctors acquainting them of the proposal and so creating interest resulting in new membership. This could be done by the Medical Society of Nova Scotia with the help of the local Societies."

The following officers were elected for the coming year—

President—Dr. Dan Murray, Tatamagouche.

Vice-President—Dr. H. B. Havey, Stewiacke.

Secretary-Treasurer—Dr. D. S. McCurdy, Truro.

Representatives to the Medical Society of Nova Scotia—Dr. R. A. MacLellan, Rawdon, and Dr. T. R. Johnson, Great Village.

Executive Colchester-East Hants Medical Society—Dr. Hugh Peel, Truro: Dr. D. F. McInnis, Shubenacadie.

### WESTERN NOVA SCOTIA MEDICAL SOCIETY.

The regular annual meeting of the Western Nova Scotia Medical Society was held at the Grand Hotel, Yarmouth, on May 29th, at 4 P. M. The meeting was presided over by Dr. L. J. Lovett of Bear River. Preceding the meeting notice was sent to all the members by the Secretary, Dr. Lebbetter, asking for a full attendance in view of the fact that the question of federation of the Medical Society of Nova Scotia with the Canadian Medical Association was to be discussed and voted on. To put this subject fully before the Society Dr. Charles A. Webster of Yarmouth was asked to prepare a discussion taking the negative side of the question and Dr. Charles K. Fuller of Yarmouth was



asked to take up the affirmative. The papers of Dr. Webster and Dr. Fuller are published below. Following a full discussion of the subject the following resolution was passed—"That this Western Counties Medical Association in Annual Meeting assembled goes on record as being favourable to the idea of closer affiliation of the Nova Scotia Medical Society with the Canadian Medical Association, details of which to be carried out by the Nova Scotia Medical Society."

The following slate of officers was elected for the coming year.

President—Dr. C. K. Fuller, Yarmouth.

Vice-Presidents—Dr. P. E. Belliveau for Clare.

Dr. Z. Hawkins for Yarmouth County.

Dr. H. H. Banks for Shelburne County.

Secretary-Treasurer—Dr. T. A. Lebbetter, Yarmouth.

The Executive Representatives for 1937 to the Medical Society of Nova Scotia—Dr. G. V. Burton, Yarmouth, and Dr. J. E. LeBlanc, West Pubnico.

#### **A Consideration of Federation of the Nova Scotia Medical Society with the Canadian Medical Association at the Annual Meeting of the Western Nova Scotia Medical Society, May 29, 1936.**

NEGATIVE—DR. C. A. WEBSTER.

It is proposed that the N. S. Medical Society federate with the Canadian Medical Association. A committee was appointed by the N. S. Medical Society to study the scheme. To date they report that there is no indication of any particularly keen interest in the proposal by the doctors. There are 420 doctors in practice in N. S.

233 (over half) are members of the Nova Scotia Medical Society

16 are members of the Canadian Medical Association alone

171 are members of no Society.

Of the 233 doctors belonging to the N. S. Medical Society, 114 belong to both Societies.

The cost of membership in each Society is \$10.00, so that the annual dues are \$20.00 if one joins both Societies. It is proposed to reduce this to \$18.00.

It is proposed that no doctor can belong to the N. S. Medical Society alone. If he joins the federal Association he must pay \$18.00 and belong to the C. M. A. and the N. S. Medical Society.

It proposes that members of Section E, (that is, members of the C. M. A. alone), may continue their present membership in the federal Association. Does this mean at the present fee of \$10.00 yearly? It is not explicit.

It states that non-members of either or both organizations can come in only as members of both Societies, or as members of the C. M. A. alone. It looks as if you can become a member of both Societies for \$18.00, or can become a member of the C. M. A. for \$10.00. In this case, how many doctors are going to join the N. S. Medical Society? They can save \$8.00 by joining the C. M. A. alone. It is not that they like the N. S. M. S. less but they like the C. M. A. more. They will also get the C. M. A. Journal. How many will subscribe for that excellent journal "The N. S. Medical Bulletin"?

The beginning of autocracy or Fascism or Nazism is shown at the start, when it immediately states that a doctor cannot join the N. S. Medical Society unless he also joins the C. M. A. Why cannot a doctor join *any* organization

if he so wishes? Is this an interference with a man's liberty? The liberty to choose and to act according to one's judgment should not be lightly thrown away.

In speaking of the advantages of Federation they claim that we lose none of our present Home Rule. Don't we? The question as to what Society you shall join is at once taken away for one thing.

I claim that no large central organization can act as wisely or decide local questions as well as a small local organization which can see the differing viewpoints near at hand, and is conversant with the acts and happenings pertaining to the matter under discussion.

Under every Democratic Government, public administration begins with the Municipality, then the County, then the Province, and then the Federation. Each has its rights, duties and obligations. When these rights, duties and obligations are taken over by the Federal powers, we have autocracy and all questions are decided from above, and the local bodies become weakened and cease to act, and citizens or members do as bid, and liberty ceases. I claim that we should not federate as proposed, as we will lose too much, although I believe that we should affiliate with the various Medical Societies for united action on certain questions, and I shall bring that up now.

It is true that as the N. S. Medical Society, we can only speak and act for N. S. This is what the N. S. Medical Society is for, and is what we want. However the N. S. M. S. can affiliate any time with other Provincial or Dominion Medical Societies to help mould the opinion and support the bigger policy of a Dominion-wide medical opinion on any question of National importance. I claim that this is the way the N. S. M. S. should act regarding the C. M. A., and that the N. S. M. S. should preserve its powers, liberties and identity. I believe in the Federation of the various Provinces to make Canada, but I also believe in the Federation of the whole of North America, and in the Federation of all English speaking countries, but I don't believe in the narrow, bigoted Nationalism that is shown at present in all nations. I do not believe that this spirit should enter into the discussion of our endeavors to have the various Medical Societies act for the best interests of the doctors and of the people.

Science is not national, especially medical science. It is bigotry to emphasize Canadianism or Nationalism. Great changes are taking place in the economic system and in the professional relations of the doctors. Some of these will have to be met by the joint action of the various Medical Societies as they affect the whole Province or Nation. Some are local and are best met, in my opinion, by the local Medical Societies. Affiliation as the occasion arises will meet the National questions, such as Health Insurance and State Medicine. Our municipal medical questions are best met by our local Society. In the style of a celebrated Canadian Politician I hope this W. N. S. Medical Society adopts the motto of "Affiliation ever, federation never."

AFFIRMATIVE—DR. C. K. FULLER

Mr. Chairman and Gentlemen:

I do not wish to "Cry Havoc" but today we are considering a question that is vital to us all. The political world is more or less crazy and we already have very definite indications that within a short time the Medical Profession

is going to be State controlled and unless we are careful we will find ourselves forced to work under and be controlled by laymen putting into effect laws that have been made by laymen or even worse, by a selected group of laymen, namely, Politicians who have but one object in view "to consolidate their own positions". Surely we have learned from our own Workmens Compensation Act what authority over our profession laymen can be given by our Governments.

The time to meet a problem is before it occurs so we can mould it to our needs and not wait until the thing has happened and then weep and wail because it's unjust. Today we must forget many of the outworn themes of our profession and we must bring ourselves up to the level of the times in other words, hateful as it sounds, we must unionize and believe me gentlemen, we must have a perfect 100% organization that is professional and knows no politics either Liberal or Conservative, an organization that in its local branch has 100% membership and the local branches 100% behind the Provincial, and the various Provincial organizations 100% behind the Canadian Medical Association.

Nothing short of this is going to be of any avail. I am not going to discuss the British Columbia or the Alberta legislation that has come into effect except to say that it leaves the problem of the indigent still the doctor's problem and robs him of the very means that permitted him to cope with it and in addition places him in the position where he must carry on to suit a board composed of laymen.

Eventually we will have Dominion legislation and if we are to have the type of legislation that is best for all of the people and best for all of the profession then we must place such a weapon in the hands of the main organization of our profession, namely, the Canadian Medical Association, that they can go to the elected Representatives in Parliament and say "unless you do so and so you are sitting in your last Parliament for I represent all the Doctors in your constituency and they wish this and they will unite to prevent your return". That would make any politician consider well his acts.

Dr. Webster has said there is a danger of us losing our identity. I can only answer that by asking you, has our local Society lost any of its identity or individuality by being a branch of the Nova Scotia Medical Society? I know you will agree that it has not. This is just the same question over again. I do not care under what name this is brought about, Federation or Amalgamation or anything else, as long as it is brought about, the how of an act is not important it is what that act does that is essential and so I think not only should we support this resolution but we should also do our bit locally to make it really operative namely, get every single practising physician of our vicinity into our local organization and keep ourselves informed of what is going on and so I would move that the Western Nova Scotia Medical Society place itself on record with the Nova Scotia Medical Society as being in favor of federation with the Canadian Medical Association.

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#### VALLEY MEDICAL SOCIETY.

The Annual Meeting of the Valley Medical Society was held at the Queen Hotel, Annapolis Royal on May 22, 1936 with the President, Dr. L. J. Lovett of Bear River in the chair.

Officers for 1936-1937 were elected as follows:

President:	Dr. O. R. Stone.....	Bridgetown
Vice-Pres:	Dr. J. R. McCleave.....	Digby
	Dr. Ira Sutherland.....	Annapolis Royal
	Dr. T. A. Kirkpatrick.....	Kentville
Sec'y-Treas.	Dr. H. E. Kelley.....	Middleton
Members of Executive Medical Society of Nova Scotia:		
	Dr. A. B. Campbell.	Dr. V. D. Schaffner.

After the transaction of routine business the meeting was addressed by Dr. H. G. Grant, Secretary of the Medical Society of Nova Scotia who briefly outlined what had been done regarding amalgamation of the Provincial Society with the Canadian Medical Association. The following resolution was moved by Dr. V. D. Schaffner, seconded by Dr. A. B. Campbell and passed unanimously: "The Valley Medical Society puts itself on record as being in favor of amalgamation of the Medical Society of Nova Scotia with the Canadian Medical Association and endorses the recommendations of the Central Committee of the Medical Society of Nova Scotia as published in the Bulletin to date."

The Following Programme was proceeded with:

Presidential Address.....	Dr. L. J. Lovett
Carcinoma of the Caecum with Case Report.....	Dr. E. A. Fergusson
Case Report—Adamantine Cyst.....	Dr. M. R. Elliott
Case Reports—Intrathoracic Tumor	
—Lobectomy for Bronchiectasis.....	Dr. V. D. Schaffner
Case Report—Leukaemia.....	Dr. L. R. Morse
Case Report—Hodgkins Disease.....	Dr. W. R. Dickie
The Surgical Treatment of Pulmonary Tbc.....	Dr. V. D. Schaffner
The Diagnosis and Treatment of Pleurisy.....	Dr. C. J. W. Beckwith
The semi-annual meeting will be held in Middleton in October.	

### THE PRESIDENTIAL ADDRESS

Valley Medical Society—Annual Meeting Annapolis Royal—  
May 21, 1936.

L. J. LOVETT, Bear River.

GENTLEMEN:

At the expiration of my term as president of this Society, I wish to express briefly my appreciation of the honor you did me in electing me your official head, though I was not at the meeting, and also to say how much I regret that unavoidable circumstances prevented me from being present at the October meeting which was held in my own home town. I was chasing the lordly moose, while you were devouring the juicy steaks some fortunate hunter had provided.

This hunting trip is the only vacation I allow myself from the fetters that bind a medical practitioner to his work, and I have found it a true panacea for the weariness of mind and body that is the inevitable heritage of every busy doctor.

I understand that though the attendance at the October meeting was not large, the papers presented were of a high standard, and the discussions interesting and instructive.

Right here, I wish to thank your efficient Vice-president for carrying on the duties of the chair in my absence, and I also wish to pay a tribute to the Secretary, Dr. Kelley, on whom much responsibility has rested through the year, whose position has demanded and received much time and personal attention to its duties. As to the Society itself:—I believe these small, localized Medical organizations such as our Valley Medical, are of undoubted value in interchange of opinions on strictly professional matters, beside diagnosis and treatment of unusual cases, for, working as our members do under practically the same conditions as to class of patients treated, difficulties of successful treatment in out-of-way sections, and the present unsatisfactory municipal remuneration for charity cases, these localized Medical societies can become an useful clearing house for many of our pressing problems. Perhaps their greatest value is the spirit of fraternal comradeship they engender.

As one of the Valley's oldest practitioners, beginning practice long before the days of these *subsidiary* Medical societies, I can look back to the time when Doctors in the same field or in over-lapping fields were none too friendly, and gave fine exhibits of the green eyed monster.

Today, we do not treat a man who opens practice in our vicinity as a pariah or a numskull, but accord him a fraternal welcome. You young men before me, will, I know, never have the experience I had as a budding Medico. Purchasing the practice of a Doctor removing to another field, without any offence on my part, I seemed to be a real thorn-in-the-flesh to the elderly practitioner who had been long established, and of whom my predecessor had rather stood in awe, and had passively endured many insults. It was the day of horses, and he had made the boast that if he met me, he would drive me off the road and ditch me. I had heard of his boast, and one day we had to pass on a narrow stretch of highway. He deliberately took the centre of the road, whipped up his horse, and drove directly at me. But, this time, he "had the wrong pig by the ear", for I kept my half the road, and in passing, ripped the side rail off his sleigh, leaving him a sadder and a wiser man as far as I was concerned, and I am sure with a great respect for me. I might say, that in later years, we became great friends and cronies.

We talk of old schools of Medicine, but where he ever found authority for some of his unique diagnoses, it puzzled me to know.

For instance;—one he often made of a mysterious disease he called "Diarrhoea of the Brain". That was too much for me, and against which, I could not compete.

Comparing my early years of practice with those of the present day, I see many sharp contrasts:—Plodding horses exchanged for the swift motor car. Hospitals and trained nurses, even in a rural practice, procurable to assure the proper care of patients, instead of the hap-hazard and ignorant home treatment, against which we had to wage a continuous battle for a patient's life:—X Ray, to assist in diagnosis, instead of groping blindly for the evasive trouble:—the advance in Drug preparations, and scientific methods of treatment.

In this connection, reading of the recent May meeting of the American Medical Association at Kansas City last week, the largest body of organized Medicine in the world with its 100,000 Physician and Surgeon members, I mentally contrasted its program with the programs of old-time similar Medical Association meetings, showing the vast advance and progress in the scope of knowledge and treatment of diseases, and the power today, of the policies of organized Medicine as a legal protection for the practitioner. There were

150 scientific displays demonstrating advances in Medical knowledge in the past year alone, explained by the noted investigators who were responsible for the research work, and had achieved results.

Symposia were presented on "Electric Action Potentials" of the brain, and the study of electricity generated in the brain by mental processes and significant variations from the normal in certain diseases. There was also a timely scientific demonstration of treatment in traffic accidents, with practical information on emergency treatment for fractures of the lower limbs. Discussions of the chemistry of the vitamins, the changes in the human body caused by a deficiency of these essential substances, and the new sources from which to obtain them, also the new field of Hormones, with their application.

All these subjects are advances into new and far-reaching branches of surgical and medical science, broadening them out into seemingly limitless fields of service to the human race. We, older practitioners, are almost envious of you young men, who have "Youth" to explore this wonderful future before you.

Perhaps it is a sudden decent from the ethics of our profession to the very practical side of present-day practice, and yet it seems necessary, to remind you that one thing remains the same:—the indigent sick. I think we all realize the last few years has greatly increased the extent to which physicians are called upon to supply services and drugs to an increasing number of needy patients, when this expense should be born by the Municipality, and the physician properly remunerated.

I think organized effort must be made soon to stem the tide of this unfair treatment by Municipal authorities, and some fair basis of agreement reached, or Medical practitioners themselves will have the value of their services decreased by the struggle to maintain a decent scale of existence.

As one Doctor of long experience in a country practice has truly said:—"A doctor's work is too big to have to struggle about accounts". "The grim battle with death is worrisome enough for him."

Now, I feel I must not longer trespass on the time of this meeting, as there is an interesting program to be presented, and probably some discussion on matters of moment to us locally. I wish to thank you again for the honor of having been your President, and assure you that I will give my whole-hearted support to my successor, to those associated with him, and the interests of this society.

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### LUNENBURG-QUEENS MEDICAL SOCIETY.

There was a special meeting of the Lunenburg-Queens Medical Society held on the evening of June 3rd to discuss the question of amalgamation. After a full discussion the Society voted unanimously in favour of the proposed federation of the Medical Society of Nova Scotia with the Canadian Medical Association.

# Department of the Public Health

## PROVINCE OF NOVA SCOTIA

Office—Metropole Building, Hollis Street, Halifax, N. S.

MINISTER OF HEALTH - - - - HON. F. R. DAVIS, M.D., F.A.C.S., Halifax

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Chief Health Officer - - - -	DR. P. S. CAMPBELL, Halifax.
Divisional Medical Health Officer - -	DR. C. M. BAYNE, Sydney.
Divisional Medical Health Officer - -	DR. J. J. MACRITCHIE, Halifax.
Director of Public Health Laboratory -	DR. D. J. MACKENZIE, Halifax.
Pathologist - - - -	DR. R. P. SMITH, Halifax.
Psychiatrist - - - -	DR. ELIZA P. BRISON, Halifax.
Superintendent Nursing Service - - -	MISS M. E. MACKENZIE, Reg. N., Halifax.

### OFFICERS OF THE PROVINCIAL HEALTH OFFICERS' ASSOCIATION

President - - - -	DR. F. F. EATON - - - -	Truro.
1st Vice-President - - - -	Dr. P. E. BELLIVEAU - - - -	Meteghan
2nd Vice-President - - - -	DR. H. J. TOWNSEND - - - -	Louisburg
Secretary - - - -	DR. P. S. CAMPBELL - - - -	Halifax.

### COUNCIL

DR. F. O'NEIL - - - -	Sydney
DR. G. V. BURTON - - - -	Yarmouth
DR. R. M. BENVIE - - - -	Stellarton

### MEDICAL HEALTH OFFICERS FOR CITIES, TOWNS AND COUNTIES

<p><b>ANNAPOLIS COUNTY</b></p> <p>Hall, E. B., Bridgetown. Braine, L. B. W., Annapolis Royal. Kelley, H. E., Middleton (Mcpy. &amp; Town).</p> <p><b>ANTIGONISH COUNTY</b></p> <p>Cameron, J. J., Antigonish (Mcpy). MacKinnon, W. F., Antigonish.</p> <p><b>CAPE BRETON COUNTY</b></p> <p>Tompkins, M. G., Dominion. Morrison, J. C., New Waterford. Martin, H. J., Sydney Mines. McNeil, J. R., Glace Bay. McLeod, J. K., Sydney. O'Neil, F., Sydney (County), South Side.</p>	<p>Murray, R. L., North Sydney. Townsend, H. J., Louisburg. Gouthro, A. C., Little Bras d'Or Bridge, (Co. North Side).</p> <p><b>COLCHESTER COUNTY</b></p> <p>Eaton, F. F., Truro. Havey, H. B., Stewiacke. Johnston, T. R., Great Village (Mcpy.)</p> <p><b>CUMBERLAND COUNTY</b></p> <p>Bliss, G. C. W., Amherst. Drury, D., Amherst (Mcpy.) Gilroy, J. R., Oxford. Stewart, Chas. E., Parrsboro. Eaton, R. B., River Hebert (Joggins). Walsh, F. E., Springhill.</p>
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**DIGBY COUNTY**

DuVernet, Edward, Digby.  
Pothier, H. J., Weymouth, (Mcpy.)  
Doiron, L. F., Little Brook.

**GUYSBORO COUNTY**

Chisholm, A. N., Port Hawkesbury, (M.H.O. for Mulgrave).  
Sodero, G. W., Guysboro (Mcpy).  
Moore, E. F., Canso.  
Monaghan, T. T., Sherbrooke (St. Mary's Mcpy.)

**HALIFAX COUNTY**

Almon, W. B., Halifax.  
Forrest, W. D., Halifax (Mcpy.)  
Glenister, E. I., Dartmouth.

**HANTS COUNTY**

Bissett, E. E., Windsor.  
MacLellan, R. A., Rawdon Gold Mines (East Hants Mcpy).  
Reid, A. R. Windsor (West Hants Mcpy.)  
Shankel, F. R., Windsor, (M.H.O. for Hantsport.)

**INVERNESS COUNTY**

Chisholm, A. N., Port Hawkesbury.  
Boudreau, Gabriel, Port Hood, (Mcpy. and Town).  
MacLeod, F. J., Inverness.

**KINGS COUNTY**

Bishop, B. S., Kentville.  
Bethune, R. O., Berwick (Mcpy.)  
de Witt, C. E. A., Wolfville.  
Morash, R. A., Berwick.

**LUNENBURG COUNTY**

Marcus, S., Bridgewater (Mcpy.)  
Reh fuss, W. N., Bridgewater.  
Morrison, L. N., Magone Bay.  
Zinck, R. C., Lunenburg.  
Zwicker, D. W. N., Chester (Chester Mcpy).

**PICTOU COUNTY**

Blackett, A. E., New Glasgow.  
Chisholm, H. D., Springville, (Mcpy.)  
Bagnail, P. O., Westville.  
Crummey, C. B., Trenton.  
Dunn, G. A., Pictou.  
Benvie, R. M., Stellarton.

**QUEENS COUNTY**

Ford, T. R., Liverpool (Mcpy.)  
Smith, J. W., Liverpool.

**RICHMOND COUNTY**

Digout, J. H., St. Peters (Mcpy.)

**SHELburne COUNTY**

Brown, G. W. Clark's Harbour.  
Fuller, L. O., Shelburne. (Town and Mcpy).  
Wilson, A. M., Barrington, (Barrington Mcpy.)  
Lockwood, T. C., Lockeport.

**VICTORIA COUNTY**

MacMillan, C. L., Baddeck (Mcpy.)

**YARMOUTH COUNTY**

Hawkins, Z., South Ohio (Yarmouth Mcpy).  
Burton, G. V., Yarmouth.  
Lebbetter, T. A., Yarmouth (M.H.O. for Wedgeport).  
Chiasson, B. I., (Argyle Mcpy).

Those physicians wishing to make use of the free diagnostic services offered by the Public Health Laboratory, will please address material to Dr. D. J. MacKenzie, Public Health Laboratory, Pathological Institute, Morris Street, Halifax. This free service has reference to the examination of such specimens as will assist in the diagnosis and control of communicable diseases; including Kahn test, Widal test, blood culture, cerebro spinal fluid, gonococci and sputa smears, bacteriological examination of pleural fluid, urine and faeces for tubercle or typhoid, water and milk analysis.

In connection with Cancer Control, tumor tissues are examined free. These should be addressed to Dr. R. P. Smith, Pathological Institute, Morris Street, Halifax.

All orders for Vaccines and sera are to be sent to the Department of the Public Health, Metropole Building, Halifax.

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**Report on Tissues sectioned at the Provincial Pathological Laboratory from May 1st, 1936, to June 1st, 1936.**

During the month, 195 tissues were sectioned and examined, which with 9 tissues from 2 autopsies, makes a total of 204 tissues.

Tumours, malignant.....	25
Tumours, simple.....	15
Tumours, suspicious.....	2
Other conditions.....	153
Tissues from 2 autopsies.....	9



Communicable Diseases Reported by the Medical Health Officers  
for the month of May, 1936.

County	Chickenpox	Diphtheria	Infant's Paralysis	Influenza	Measles	Mumps	Paratyphoid	Pneumonia	Scarlet Fever	Typhoid Fever	Tbc. Pulmonary	Tbc.-other Forms	V. D. G.	V. D. S.	Whooping Cough	Erysipelas	German Measles	Pink Eye	TOTAL
	Annapolis.....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	24	..
Antigonish.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape Breton....	2	8	..	6	..	..	..	2	9	1	3	..	..	..	..	..	..	..	31
Colchester.....	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	1	..	4
Cumberland....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Digby.....	..	..	..	..	8	17	..	..	..	..	..	1	2	..	..	..	18	25	71
Guysboro.....	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	2
Halifax City..	..	7	..	..	1	..	..	..	33	..	2	..	..	..	5	1	..	..	49
Halifax.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hants.....	..	1	..	..	10	..	..	2	..	..	..	..	..	..	..	..	..	..	13
Inverness.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Kings.....	8	..	..	1	..	..	..	1	..	..	1	1	1	..	2	..	7	..	21
Lunenburg....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pictou.....	5	..	..	7	..	..	..	1	6	..	1	..	1	..	..	..	..	..	21
Queens.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Richmond.....	..	..	..	5	..	..	..	..	..	..	..	..	1	..	..	..	..	..	6
Shelburne....	..	..	..	..	4	..	..	..	..	..	..	..	1	..	15	..	..	..	20
Victoria.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yarmouth.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL.....	18	16	..	19	23	17	..	8	52	1	6	2	7	..	22	1	50	25	267

RETURNS VITAL STATISTICS FOR APRIL, 1936.

County	Births		Marriages	Deaths		Stillbirths
	M	F		M	F	
Annapolis.....	21	15	4	10	12	0
Antigonish.....	18	9	1	22	14	2
Cape Breton....	100	90	23	47	40	4
Colchester.....	26	18	17	14	13	4
Cumberland....	47	40	13	22	23	5
Digby.....	27	23	7	20	15	0
Guysboro.....	17	16	3	8	5	1
Halifax.....	119	85	64	52	48	11
Hants.....	21	19	6	8	9	1
Inverness.....	27	21	7	15	5	0
Kings.....	24	19	10	12	13	1
Lunenburg....	32	32	16	28	20	3
Pictou.....	34	38	14	11	4	2
Queens.....	8	7	4	7	3	1
Richmond.....	9	12	0	5	7	0
Shelburne....	7	14	3	6	6	1
Victoria.....	6	2	3	0	2	0
Yarmouth.....	24	16	3	8	14	1
	567	476	198	295	253	37

## Personal Interest Notes

DR. H. B. HAVEY of Stewiacke was the guest speaker at a one hundred per cent meeting of the Truro Rotary Club on May 15th. Dr. Havey gave a very interesting address on the great French scientist, Louis Pasteur. Dr. F. F. Eaton was chairman and on behalf of the club extended to Dr. Havey the thanks of the local Rotarians.

Dr. E. M. Curtis of Truro visited his home at Princeport early in May while en route from Kentville to Montreal where he will spend the next month on special heart and anaesthetic study. Dr. Curtis, who has been resident physician at the Nova Scotia Sanatorium at Kentville since January, will return to Truro early in June where he will again resume his practice.

Dr. S. W. Williamson of Yarmouth paid a short visit recently to Providence, R. I.

Dr. and Mrs. G. W. T. Farish of Yarmouth left on May 19th for Montreal en route to Victoria, B. C., where Dr. Farish will attend the annual meeting of the Canadian Medical Association, at which he will represent Nova Scotia on the Council. Dr. and Mrs. Farish will also stop at Winnipeg, where Mrs. Farish will attend the National I. O. D. E.

Dr. J. K. McLeod of Sydney also plans to attend the meeting of the Canadian Medical Association to be held in Victoria from June 22nd to the 26th. Dr. McLeod will represent our local Society as a member of the Council of the Canadian Medical Association.

Dr. R. R. Prosser a graduate of Acadia, 1927, and also a graduate in Medicine of Edinburgh, 1931, has recently been transferred to Shillong, Assam, India, where he is doctor in charge of the Military Hospital.

Dr. T. A. Lebbetter of Yarmouth recently returned home from spending a few days in Boston.

Dr. R. St. J. Macdonald, Professor of Public Health at McGill University, Montreal, Mrs. Macdonald and family, arrived in Bailey's Brook last week and will spend the summer on the Doctor's farm home there.

Dr. Frank G. Mack and Dr. G. A. Winfield, both of Halifax, have attended the meetings of the American Urological Association, which were held in Boston recently.

Dr. and Mrs. R. Evatt Mathers of Halifax, have returned home from a two month's visit in England.

Dr. Jean Hunter, Dalhousie 1914, of Dumfries, Scotland, is the guest of her mother, Mrs. (Dr.) J. W. MacLean, North Sydney. This is Dr. Hunter's first visit to her home in many years.

# 2 Important Announcements

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### **"Post-graduate Course in Paediatrics."**

An intensive post-graduate course in paediatrics is to be offered by the Staff of the Children's Memorial Hospital in Montreal for one week beginning Monday, September 14th, 1936. An interesting practical and instructive schedule has been arranged for every day of the week during which there will be lectures and demonstrations in the more important phases of paediatric work including the special branches of surgery, orthopaedics, otolaryngology, etc.

Admission to the course will be limited; a nominal fee of \$5.00 will be charged which will include lunch daily at the Hospital for the duration of the course.

An entertainment committee will look after the social needs of the members of the course during their stay. The course will end with a dinner at which it is proposed to have a prominent speaker.

Those interested are requested to communicate with Dr. H. S. Mitchell, Superintendent, Children's Memorial Hospital, Montreal.

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### **Sickness Prevention Aim of Profession.**

The goal of the medical profession today is the prevention of sickness, and the pendulum is swinging to that objective and away from the age-old practice of treatment after illness has struck, Dr. J. P. McGrath told the Kentville Gyros at their regular luncheon May 15th.

"Through the medium of public lectures on medical topics, yearly physical examinations, improved hygienic conditions, vaccinations and immunization with sera, etc., it is the hope of the profession that the advent of serious illness and disabling conditions, with the resultant suffering and economic loss to the country as a whole, will be prevented," he said.

Gordon Barrett was the chairman of the evening and the guests included D. R. MacDonald and C. L. Travis, members of the Halifax Gyro club.—*Kentville Advertiser*, May 21.

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### **Discuss T. B. Home For County.**

New Glasgow, May 22—The advisability of a Pictou County T. B. hospital was discussed at a meeting held in the council chambers here with Warden F. H. McNeil, of Little Harbor, as chairman and members of the medical profession and representative citizens of the towns and rural districts in attendance. The need of definite action in the matter was stressed by the doctors and it was the general opinion that an annex to Aberdeen Hospital, New Glasgow, or Sutherland Memorial Hospital, Pictou, where there is at present medical and surgical equipment, was the most favorable plan.


A committee to get full necessary information and to report at a future meeting was appointed, comprising Warden McNeil, Dr. W. H. Robbins, New Glasgow; Dr. H. B. Whitman, Westville; Dr. M. R. Young, John F. Macdonald, Pictou; W. F. Fraser, New Glasgow; Robert McNabb, L. S. Balcome, Trenton; Mayor James Saunders, Westville, and Mayor George Saunders, Stellarton.—*Pictou Advocate*, May 28.

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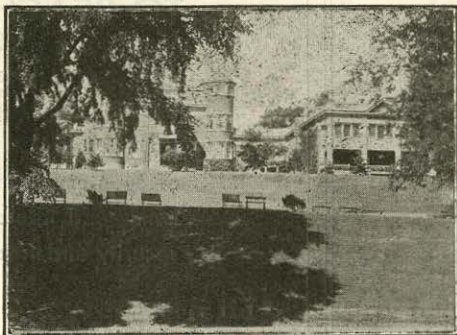
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