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EDITORIAL

THE WAR AND DRUGS.

The war, now raging in Europe, has seriously disturbed the supply of many drugs. This state of affairs should not be allowed to continue for any great length of time. There are both energy and skill enough in this country to manufacture any of the medical products that this country has been in the habit of importing from Germany. This country and Great Britain may feel themselves bound by a code of honor that would compel them to regard a patient as more than a mere "scrap of paper"; but the interests of suffering humanity must not be allowed to go by the wall.

As the government of a country can appropriate for its use any private property under the law of eminent domain, so here all patent rights should be set aside in order that necessary chemical preparations may be produced within our country. There need be no hesitation upon this score. The war may last for a considerable time; and for long after the war is over the conditions may not settle down into the *status quo ante*, and there may not be a resumption of trade relationships with Germany. In the meantime Canadians should manufacture what they require.

TRUE DEEDS OF HEROISM.

We are not going to discuss what courage is. Many learned theories have been advanced, but the one we are concerned with for the moment is that members of the medical and nursing professions have exposed themselves to extreme danger in the discharge of their duties.

Army surgeons have gone into the trenches of the allies in order to render first aid to the wounded, and have suffered heavily for their bravery and devotion to duty. Nurses have on many occasions remained at their posts within the range of the enemy's fire, and have attended

the sick and wounded in buildings that were exposed to shell fire, making heroic efforts to have their patients removed to points of safety. For such acts a number have already won national recognition, and have been honored with various titles.

While war brings out some of these high and noble qualities, it has also revealed some of the basest that can be found in human nature. There are many well-authenticated instances where Red Cross nurses have been fired upon, mutilated and imprisoned because they aided the wounded of the opposing army.

THE ONTARIO MEDICAL COUNCIL.

The elections for the Council will be held at an early date. It is to be hoped that the medical practitioners in the various districts will impress upon the candidates the necessity of taking up the question of reciprocity with Great Britain, and having the matter disposed of in a satisfactory manner. There should be reciprocity between Ontario and Great Britain. This has been well brought out during the present war. Many worthy Ontario physicians and surgeons found themselves seriously handicapped.

MEDICAL INSPECTION OF SCHOOLS.

According to recent Ontario legislation and the regulations issued from the Department of Education, public and separate school boards may now institute medical inspection of the children in attendance upon these schools.

The regulations declare that where provision has been made for free medical treatment of pupils whose parents or guardians are unable to pay therefor, the boards may combine with local organizations approved for the purpose. This work is to be entrusted to a School Medical Inspection Committee, who shall appoint qualified medical inspectors. Where it is not practicable to secure a competent person with the approval of the Minister of Education and Provincial Secretary, the local Medical Officer of Health shall perform the duties of medical inspector, or failing that one or two graduate nurses of not less than two years' experience. In addition to the medical inspector, school nurses are also to be appointed. The cost of this work is to be borne by the board as part of the school maintenance.

The number of visits to each school is left to the committee, but a minimum of once a quarter for rural school sections, once a month for village schools, once a fortnight for towns and once a week for cities is fixed.

The inspection is to be carried on in private, and shall include a complete physical examination of each pupil as soon as possible after his admission to the school, tests for sight and hearing. Examination of heart and lungs must be over clothing, except in special cases, and where permission is granted, or in the presence of parent or guardian. In addition to this a classroom inspection is to be made every half-year.

DISEASE AMONG SOLDIERS.

It appears as if this war is going to set a low mortality rate among the soldiers of the allies from disease and wounds. It has been considered that a death rate of five or six per cent. from wounds at the base hospital was a good record. So far the rate has been much below this. In many instances it has been under one per cent. The high-velocity bullet is self-sterilized and inflicts a wound that has a tendency to heal well.

Then, again, first aid at the front is now much more efficient than in former wars. The application of proper dressings and the rigid avoidance of unnecessary handling and probing of wounds has gone a long way to reduce infection. In the Boer war the British lost by death 22,000 of the army, and of this number 14,000 died of diseases, mostly typhoid fever, and not of wounds.

In the matter of preventing the occurrence of typhoid fever, vaccination has already worked wonders. The proper care of the water supply is also of first importance.

With the coming of winter, the prevention of pneumonia will be a problem. It cannot be prevented, like dysentery, by the conscientious boiling of all the water drunk. Many people carry pneumonia germs with them, which are harmless as long as a soldier is in good condition, but which make their way to the lungs when the resisting powers of the body are lowered by exposure incident upon long marches and hard fighting in cold and rain.

ORIGINAL CONTRIBUTIONS

PRESIDENTIAL ADDRESS: ACADEMY OF MEDICINE,
TORONTO.

BY H. B. ANDERSON, M.D.

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IN the first place, permit me to express my deep appreciation of the honor of having been elected president of the Academy of Medicine for the current year. When one reflects on the manifold duties and responsibilities involved, he may well be pardoned some misgivings as to the wisdom of your selection. If, however, an abiding faith in the mission of the Academy and of its possibilities of usefulness to the profession of Toronto, and a willingness to do one's best to promote its welfare, will compensate for other deficiencies, I may hope to justify a claim to these qualifications. Until two months ago everything gave promise that this year should be marked by a continuance of the phenomenal progress which has attended the Academy in increasing degree each succeeding year since its organization in 1907. The increase in membership, now about 400, the growing attendance at meetings, the ready response from leaders of the profession, abroad as well as at home, to contribute to our programmes, the steady growth of the library, and not least, the general recognition that we now have a strong and representative organization, which reflects the opinion and mobilizes the influence of the profession, are all gratifying evidences of our progress. The rapid growth of the Academy, however, has produced problems pressing for solution. Already our accommodation for both library and meeting purposes is greatly overtaxed. The council had considered the matter and had formulated a plan to submit to the Academy to make provision for these urgent needs.

Through the munificence of Mrs. Ross the means were provided for the erection of a beautiful auditorium as a memorial to our revered colleague and first president, the late J. F. W. Ross. This splendid contribution, with others in sight, if supplemented by reasonable assistance from our own members, brought within view the realization of a building in Queen's Park worthy of our profession and city.

The sudden breaking of the cloud which has so long threatened our Empire and the peace of the world, however, has dislocated the affairs of our country and turned the resources and energies of our people from peaceful pursuits to a struggle against a military despotism, for not alone our national existence, but for the cause of freedom and the future of civilization.

These events have made it necessary that our plans for building shall be held in abeyance for the time being.

In this crisis, as in the past, our profession has stood ready to accept its share of sacrifice, not only in answering the call of duty in active service, but in contributing both time and money for the care of the needy dependents of our soldiers, and for the relief of the increased sickness among the poor of our city. Most of us shall not have to face the dangers and hardships of active service, but the hearts and prayers of every Fellow will follow those of our colleagues, including the chairmen of two of our sections who have gone, and they may be assured that each of us will consider it not only a duty but a privilege, to conserve as far as possible their interests in their absence.

During this session we are unlikely to be favored by visits from transatlantic colleagues, whose contributions to our programmes have been such a valuable feature of our meetings in past years. It is a great satisfaction, however, to know that we still have our good American friends to call upon, one of whom, in the person of Dr. L. G. Cole, of New York, we shall have the pleasure of hearing to-night.

There is none among us who does not look forward with confidence to the time when "danger's troubled night depart" and peace with honor shall be again established. In the meantime there is no duty more important, no service greater, with those of us who remain at home can render our country than loyally to uphold those institutions and interests committed to our special care.

May one go farther, and express the wish that one among you more worthy had been in my place, to say that this is an opportune time to rise superior to personal differences, jealousies or factions; to set aside all "ancient forms of petty strife," and emulating the spirit of political parties at home and abroad, to cultivate harmony and good-fellowship, and unite on the common ground of our interest in our institutions and the profession at large.

It is idle, as it is undesirable, among independent, earnest and educated men to look for uniformity of thought or opinion on all questions which may arise, but let us respect to the fullest degree honest differences, and as university men let us cultivate a spirit of freedom of thought and action.

Above all, let our quarrels and differences, if any, be among ourselves and not unnecessarily aired in public, or submitted to the judgment of outsiders indiscreet enough to meddle in family affairs, or ready to deliver judgment on *ex parte* evidence.

It is customary on occasions such as this to select for consideration some topic of outstanding interest and importance to the profession, a retrospect perhaps of recent medical progress, an appraisal of present

conditions, or an outline of the prospect for the future. In the ordinary even tenor of our way, the task is usually not a difficult one, but what of the present, when bloodshed and destruction is the one absorbing interest of civilized nations?

Never by contrast, however, was the nobility and humanitarianism of our own calling more strikingly exemplified—the one profession whose sympathies and interests extend beyond international boundaries, whose chief duty is to *fight* against disease, to *conserve* the health and lives of the people, even to mitigate the scourge of war itself by its merciful service rendered alike to friend and foe. This is certainly not the time to abate our zeal or slacken our efforts in furthering the beneficent influences of the art and science of medicine.

Apart from the rapid advancement which has characterized every branch of medicine in recent years, undoubtedly the outstanding feature of the period is the world-wide movement to reorganize, to correlate and to amplify, the various institutions and agencies associated with out professional work.

In the field of medical education we have seen the old proprietary schools, which served well their day and generation, gradually replaced by the medical departments of universities; the standards for matriculation and graduation have been raised, the course of study lengthened and many new subjects have been added to the curriculum; and adequate provision has been made for the systematic teaching of the fundamental sciences in extensive and well-equipped laboratories, under the direction of full-time professors.

A further tendency has been apparent during the past few years to separate medical education more widely from practice, to regard it as "primarily an educational and not a medical question." The application of this principle has already resulted in radical changes in some institutions, where the professorships in medicine, surgery and other clinical branches, have been given to men devoting all their time to teaching and research, to the exclusion of consultants or those otherwise giving a part of their time to private practice. Some authorities have gone even further, and advocate the displacement of the latter altogether as clinical teachers, because they believe it is impossible for men busy in practice to give the necessary time for the proper discharge of their academic duties.

Considering the amount of executive work thrown upon the head of a clinical department in a large medical school, such as limitation of his private work, has apparent advantages, though in some institutions a more democratic plan has been adopted to distribute the burden, namely, by vesting control in a departmental committee instead of in one individual.

The adoption of a principle, nevertheless, which would place the education of medical students, especially in the clinical branches, exclusively or largely, in the hands of men deprived of the invaluable experience of consulting or private practice must be viewed with grave misgiving by those who appreciate the responsibilities placed upon those whose duty it is to minister to the sick, and who know the necessity for not only a *thorough*, but a *thoroughly practical training*.

The exclusion of men doing private work from clinical appointments, moreover, would appear a needless limitation of the power of our universities to select the most competent man, regardless of any arbitrary restriction of the field of choice; it would deprive those responsible for the treatment of private patients of important opportunities for keeping abreast with professional progress, and would tend to the development of a medical hierarchy, capable of maintaining their positions and status by controlling the facilities for advancement (provided at the public expense) instead of by the amount and character of work accomplished, under conditions wherein active competition is not only permitted, but encouraged as far as possible.

In advising against the adoption of this principle, the Royal Commission on Medical Education in London points out "the grave danger against which practice is the best protection, the danger of forgetting the individual in the interest aroused by his disease." The financial burden involved by the limitation of clinical teaching to a class devoting itself entirely to this and research, however, makes the proposition at present impracticable and therefore of only academic interest, except in institutions where money has been specially provided for the purpose.

A glance at the hospital field reveals a similar activity, aimed at bringing these institutions up to the requirements for modern clinical investigation, diagnosis and treatment. In no place has evolution along these lines, especially in the provision of excellent accommodation for both private and charity patients, been more active than in our own city, where we now have buildings which compare favorably with those of any great medical centre in the world. In America and Great Britain there has been a recognition of the necessity for radical changes in the organization of clinical departments in order to render effort more productive and to make provision for the practical application of recent scientific discoveries to diagnosis and treatment.

In some features of hospital work, we are still far behind the best continental institutions. This applies especially to the organization of self-contained and independent clinics, each with its own wards, doctors, nurses and servants; with its own theatres, library, laboratories and equipment. These distinctive features of the continental system, as contrasted with the British, comes naturally with the former from the

common custom of having different clinics in separate buildings or clinical institutes.

The advantages of the independent clinical units, in fixing responsibility, in giving freedom in initiative and management, in permitting of the building up of each clinic along lines most suited for its special purpose, in avoiding friction and interference which paralyze action, and in providing generous rivalry, are very evident, and account in no small measure for their greater capacity to produce good team-work.

Before the Royal Commission under the chairmanship of Lord Haldane, the inadequacy of the system so long in vogue in Great Britain, to meet modern requirements, was pointed out by many of the witnesses, Sir William Osler characterizing the existent conditions "as a legacy from a period when university ideals had not reached the practical side of our medical schools."

The necessity for considering these defects of organization applies to our own hospitals quite as much as to the British, after which they are modelled.

In no particular has the old system failed more conspicuously to meet the requirements of modern progress, than in the correlation of laboratories to the general clinical work of the wards. It is quite unnecessary to urge the essential importance of good laboratory work for the investigation, diagnosis and treatment of cases in the clinic. Any serious consideration of the question must make it conclusive that laboratory examinations and investigations are as much a part of the clinic as the use of the stethoscope or the speculum. The delegation of the laboratory work of the clinics to other departments—as pathology or pathological chemistry—can never be a satisfactory solution of the problem or productive of the best results.

Even the most imperfect attempt to meet the laboratory requirements of the clinics in this way imposes on these departments an amount of detail work, which must seriously interfere with their own special functions; it places laboratory investigations in the hands of those not intimately associated with the clinical problems to be worked out, and who, no matter how competent in their own spheres, cannot be expected to have a thorough grasp of all the clinical specialities; it deprives clinicians of both the incentive and opportunities for development as practical laboratory workers, or even to apply in a satisfactory way the results of scientific methods to the cases under their control; it results in a break-down of the laboratory work of the clinic during holidays when ward-work must go on, though the college laboratories are more or less inactive; it detracts from the independence and dignity of the clinic and presents an insuperable barrier to a high order of intensive or special clinical effort.

I believe one may safely say that there is no matter so intimately related to the future development of our clinical work and the practical training of our students, as the provision of commodious and well-equipped laboratories in connection with each clinic, for routine examination, for teaching and for investigation.

I do not wish to be misunderstood as advocating a complete severance of the systematic work in the college laboratories from the applied work in the wards, but the relation should be consultative rather than executive. One need only consider the amount of work involved in the laboratory end of the clinical specialties, the special training required, the number of assistants necessary to accomplish the work, the fact that surgery, medicine and other branches and their various sub-departments all present different problems in equipment, technique and direction, in order to grasp the impossibility of having this work carried out properly in other departments.

Every argument which can be so readily adduced in favor of the thorough training of students in the scientific departments during the primary years, hinges on the necessity for preparing them properly for the study and investigation of disease, when they later enter the hospital wards. It therefore follows that sufficient time and suitable facilities must be provided for the application of the methods which they have learned, unless the chief purpose of their preparatory training is to be lost.

Leaders in the scientific departments have been among the strongest advocates of this reform, Professor Welch, of Johns Hopkins, especially having urged the necessity for "the foundation and support of teaching and investigating laboratories connected with the clinics."

To what purpose, one may ask, does the young teacher spend years in the pursuit of laboratory methods, if he is to be cut off from applying his knowledge and further developing himself, when once he passes from the systematic laboratories to the clinic? While one does not wish to appear as unnecessarily "emphasizing the obvious," the vital importance of this whole question is sufficient warrant for its careful consideration.

Looking to the future it appears plain that either clinicians must have the facilities for, and undertake the responsibilities of the laboratory work of the clinics, or the laboratory men must assume control of the wards. Modern requirements are not met by the present separation.

Carlyle has said, "that the end of man is an action, and not thought, though it were the noblest." We have happily passed the period when we are satisfied with even an intimate knowledge of the work of others, by reading, *thinking* and *talking* of scientific medicine without doing.

What is wanted now is the opportunity more than the stimulus to

work, the conditions toward which the energies of our profession have striven, when our men might be able to join as active participants in the march of progress rather than continue as interested spectators.

It has been said, with some warrant for the statement, that while our clinical staffs have discharged creditably their obligations to the sick, that they have as yet contributed little in the way of researches of scientific value. But surely if they have failed, it has been the failure of accomplishing the impossible, of attaining the end without the means, of turning out the finished product before the erection, manning, organization and equipment of the plant, rather than entirely from fault of the individual.

I should like, if time permitted, to refer to numerous other lines along which a rapid evolutionary process is taking place at the present time, such as the establishment of special institutions for medical research, the wonderful activity in the domain of public health, the popular crusades against tuberculosis, cancer, venereal disease, infant mortality, and occupational diseases; the legislative enactments in connection with workmen's compensation and national insurance, all of them questions in which we are specially interested and toward the solution of which we should use our influence.

It requires no prophetic vision to see the bearing of all these matters on the future of the medical profession. It can be said to our credit that we have always been ready to sacrifice personal interest to the common good, so that whatever tends to progress is assured of our sympathy and hearty support.

There is unfortunately a disposition on the part of some to mistake mere novelty and change for progress; and of others, looking at a broad question from a particular angle, to overestimate the relative importance of one aspect of professional activity, usually their own, as compared with another. It is here that the steady influence and hard common sense of the profession at large, whose theories have been tempered by the cool winds of practical experience, should make its influence felt, so that, while ready to try all things, we may hold fast to that which is good, at least until something better is at hand, and under all circumstances let us be assured that come what may, the chief aim and object of our profession shall be kept steadily in view the control and cure of disease.

But it must not be assumed that the future progress of medicine is bound up entirely in the activities of colleges, hospitals, research institutes, Boards of Health, and so forth. The important strategic position occupied by the general practitioner for attacking many of the problems of disease for studying the initiation of disease. its course perhaps through many years, and its final outcome has not been fully appreciated.

This aspect of clinical progress is dealt with in a masterly way in a paper by James Mackenzie, published in the *British Medical Journal*, January 3rd, 1914, and which should be read by everyone, especially by our younger men, who frequently undervalue the opportunities which general practice affords for scientific study. Coming from one, himself a general practitioner, who has probably done as much as any other physician of our time to apply scientific methods to the elucidation of important practical questions, his words are worthy of our earnest attention. He says: "The general practitioner must be recognized as an essential adjunct in research. To him especially we should look to find out the early stages of disease and its progress. Hitherto the lack of this assistance has been the cause of the tardy advance of medicine."

There is no essential reason for lack of harmony in work of aim among the different branches of our profession. Friction means dissipation of energy and lessened efficiency. Mutual support, sympathy and co-operation are essential to success.

In the fight against disease, we represent different sections of one great organization, each with all-important duties—the laboratory worker and experimenter, devising and proving new implements and methods, the hospital clinicians and specialists bringing forward that which is new, and best—withstands the test of application—thus keeping open the communications with the men on the firing line, the great body of practitioners, on whose training and efficiency after all victory ultimately depends. Our students are the recruits, who must be imbued with the proper spirit and trained to take their places in the ranks depleted by the casualties of service and by the falling out of the veterans.

At the time of the International Medical Congress last year, a London paper in an editorial on "Our Friend the Doctor," expresses a layman's point of view in these appreciative words: "The discoveries of Lister, Pasteur, Metchnikoff and Ross—to name only a few—constitute an epic worthy of a Homer. The slow dragging of her secrets from nature, the discovery of the thousand unsuspected agents through which she works, is a fascinating study to those who understand it. The laboratory is the arsenal from which the hand of the physician and surgeon is armed. But it is the wise, experienced, tender man, the first to be called, and the last, too often, to be paid, of whom we common folk are thinking when we speak of 'the doctor.'"

Every intelligent medical man appreciates the indebtedness of modern practice to laboratory men, and disparaging remarks regarding the value of their work reveal the weakness of the critic more than of the object of his criticism.

On the other hand, practitioners generally will approve of Miltzer's candid criticism of a fortunately rare type of scientific prig, who affects

a lofty disdain of everything practical and who thinks it more noble to investigate a sick rabbit than to attend a sick man. "The trouble with men trained exclusively in laboratories is two-fold; first, they do not seem to see that a medical fact observed critically by a capable physician deserves as much credence and consideration as a fact developed by laboratory methods; and, secondly, the laboratory man offers positive opinions in a field in which he has no experience." We should remember, however, that clinical and laboratory knowledge are in no way antagonistic or mutually exclusive.

Among the other factors exercising an influence in the present forward movement, we must not overlook the importance of such institutions as the Academy of Medicine. It provides every year an extensive and valuable course of post-graduate instruction; through it our younger men are given an opportunity by presenting results of investigations or reports of cases, to establish themselves in the estimation of their confreres, who will not be slow to judge them by the quality of the work they bring forward; our senior men, in the seats of the mighty, are enabled to demonstrate that their places of trait and opportunity are worthily occupied, by presenting to the great body of practitioners composing the bulk of our membership what is latest and best in their several departments; our colleagues in the scientific departments to bring their investigations and discoveries before the men who can test out their value in practice.

The library, however, is the nucleus around which centres the life of the Academy. From the time of the Alexandrian school to the present, no great medical centre ever developed apart from good libraries. Osler has said: "It is hard to speak of the value of libraries in terms which would not seem exaggerated. To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all. For the teacher and worker a great library is indispensable. They must know the world's best work and know it at once; they mint and make current coin, the ore so widely scattered in journals, transactions and monographs."

It should, therefore, be our steady aim to make this one of the great medical libraries of the world, and I believe many of us will live to see the day when this has been accomplished. It may be of interest to you to know that among medical libraries we at present rank second in Canada, 29th on this continent, and 76th in the world.

To indicate the possibilities of growth, it is encouraging to know that when Dr. Billings took charge of the Surgeon-General's library at Washington, in 1865, it contained less than 2,000 volumes, while at present it has on file 175,507 volumes, and its index catalogue has a reference to every rare case that has been recorded since the discovery of

printing, A.D. 1450. Our Fellows, through arrangements made in Washington, and the deposit of a sum of money to cover insurance, by the late Dr. Ross, have the great privilege of being able to have access to books and references from this library by merely paying express charges.

We are now prepared, at request, to place at the disposal of our members any important journal, transactions, reports, monographs or text books in which they may be specially interested.

An historical section of our library in which is collected documents relating to our history and development, biographies, autographs, photographs, hospital and health reports, journals, etc., should be started as soon as possible before passing years render much material relating to our early days unavailable.

The erection of our new building will afford an opportunity for the descendants of the many notable members of our profession, who were so closely identified with the settlement and early development of Upper Canada to appropriately commemorate their names and deeds in our common meeting place, and thus link up the history of the period in which they lived with the present.

In this connection it affords me much pleasure to say that a grandson of one of the early physicians of Toronto has set aside in his will the sum of \$10,000 to establish a lectureship in connection with the Academy, to be named after his grandfather.

The movement to organize the various city and district medical societies throughout the province and link them up with the Ontario Medical Association, and through it with the Canadian Medical Association, should receive our active support as a measure making for professional cohesion, and the increasing of our corporate influence in the community.

I cannot let the occasion pass without referring with deep regret to our losing the services of Miss Mason, who filled the position of librarian and secretary to the Academy so acceptably for a number of years. Her industry, devotion to duty and unfailing courtesy won the sincere regard and appreciation of all, and our best wishes will follow her in her new vocation.

Owing to the increasing amount of work, the Council considered it necessary to separate the duties of librarian and secretary.

The former has been placed in charge of Miss Charlton, who comes to us with a reputation established by many years' service in McGill Medical College, as one of the foremost librarians on the continent; the latter has been filled by the appointment of Miss Runciman, who already has given ample evidence of her fitness for the duties of the position.

It is our sad duty at this time humbly to acknowledge that "the art whose province it is to heal and to save cannot protect its own ranks from the inroads of disease and the waste of the Destroyer." Since we last met one of our best known and most highly esteemed Fellows and a member of Council has been called from his labors. Dr. Bruce L. Riordan was a big-hearted, generous friend, devoted to his calling, and his early death, at the height of his professional career, is a great loss to our ranks and to the community he served so faithfully. To the widow and son we all join in expression of our deepest sympathy.

The medical profession of Toronto and the Province of Ontario since its foundations were laid a century ago by the old army surgeons, has exercised an influence on our political, educational and social development which stands as a lasting monument to the character, capacity and influence of its members. We have a noble heritage and it is our duty to see that it is transmitted to those who follow us, unimpaired in dignity, honor and usefulness.

SOME INTERESTING SURGICAL CASES: FROM A DIAGNOSTIC STANDPOINT.

BY W. J. MACDONALD, M.D.

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IF definite symptoms were always produced by, and the result of, definite pathological lesions, diagnosis would be readily reduced to an exact science, but this is far from being the case. It is but too often we find that a definite pathological lesion in one patient will produce a certain train of symptoms, only to find in another patient with the same lesion a chain of symptoms of a very different character altogether. This it what makes the art of diagnosis so peculiarly difficult. When a scientific diagnosis has been definitely arrived at, treatment is a comparatively easy matter. The mechanical act of removing a portion of the stomach because it is affected by carcinoma is a much easier task than arriving at the diagnosis at a sufficiently early period to make such action productive of the best results.

For the purpose of studying intimately the differential diagnosis of surgical disease in the upper abdomen, I have selected a few cases of recent date which have been peculiarly difficult to diagnose. Each one of these cases has presented serious difficulties, and I have endeavored to show by what method, and by what reasoning a diagnosis was arrived at. In each case the result is also shown.

Case No. 1,206. ONE. Date, Sept. 10, 1914.
 Mr. J. D. _____ Address, L_____.
 Age, 64. Civil State, married. Nativity, Canadian.

CLINICAL HISTORY.

On September 10th I saw in consultation Mr. J. D. _____, of L_____. Though only 64 years of age, he presented the appearance of a man at least ten years older. His expression was drawn and haggard, his complexion sallow, dark rings around his eyes, a distinct tinge of jaundice throughout the sclera, and his entire demeanor that of one who has lost all interest in life.

His previous history had been good. At six years of age he had measles, and at fourteen scarlet fever, from which time till the summer of 1909 his health had remained perfectly good. In November of that year he had noticed a lump in his neck, which kept gradually enlarging in size, and finally in March of the following year he had it removed, and was told it was carcinoma, though as far as I could learn, no microscopic examination was made of the growth. The wound healed perfectly and gave him no further trouble. This illness, however, appeared to be the starting-point of all his future troubles, for following it he had never been entirely well.

From time to time he suffered short spells of uneasiness in the "pit of the stomach," and occasionally was greatly annoyed by the belching of gas after meals, but he never vomited. He occasionally suffered spells of dizziness so that on several occasions he was obliged to sit down until the attack passed off. During the preceding four months he had lost flesh rapidly, so much so indeed, that during that time his weight had been reduced from 212 to 166 pounds.

Physical examination revealed little, and it was evidently clear that a diagnosis must be made on the history of the case, rather than on present conditions. The heart, the lungs and the kidneys were normal. His physician reported no variation in the temperature during the preceding month, having averaged during that time between 98 and 99 deg. F. There was no abdominal rigidity, no distention, and no tenderness except on deep palpation in the region of the gall-bladder. The tongue was furred, and the bowels somewhat constipated. The stools were of normal color and consistency. At the time of examination he complained much of a burning soreness in the stomach almost immediately after partaking of food, which in turn would be followed by the belching of gas at short intervals. His appetite was much less keen than heretofore, though even yet his meals were sometimes taken with a certain degree of relish. No melaena, no hematemesis, stools and urine normal, gastric contents normal.

PHYSICAL EXAMINATION.

HEART—Normal.**LUNGS**—Normal.**ABDOMEN**—Abdominal wall thin and emaciated, showing up the venous circulation remarkably well. Tender point in epigastrium.

CLINICAL EXAMINATION.

URINE—

Amount in 24 hours, 42 ozs. Color, amber. Odor, none. Sediment, none. Reaction, acid. Sp. Gr., 1012. Albumin, none. Sugar, none.

Microscopical Examination—

Pus, none. Blood, none. Crystals, none.

Tube Casts—

Epithelial, none. Blood, none. Granular, none. Hyaline, none.

BLOOD—**Hemoglobin**—Dare (80%). Temperature, 98. Pulse, 72.**Blood Pressure**—Systolic, 120 (Normal, 100-120 mm.) Diastolic, 90 (Normal 75-95m.)**Red Cells**—No. 4,200,000 per cu. mm. (Normal—Men 5,000,000, Women 4,500,000).**White Cells**—No. 10,600 per cu. mm. (Normal 7,500).**Differential Count of 600 Leucocytes**—

Small lymphocytes, 22% (Normal 22-25). Large lymphocytes, 4% (Normal 3-6).

Large mononuclear leucocytes, 1% (Normal 1-2). Transitional Forms, 2% (Normal 1-2).

Polymorphonuclear neutrophils, 70% (Normal 70-72). Eosinophiles, 3% (Normal 2-4).

GASTRIC ANALYSIS—

Gastric extract. Meal given, toast and tea. Quantity removed, 3 ozs. Food remnants, none. Blood, none. Tissue bits, none.

Chemical Examination—

Reaction, acid. Total Acidity, 66. Free H. C. L., present. Combined H. C. L., Total H. C. L., Lactic Acid, absent. Altered Blood, none. Bile, none.

Microscopical Examination—

Micro-organisms. B. Oppler Boas, none. Yeasts, none. Sarcines, none.

X-RAY (FLUOROSCOPIC EXAMINATION).

HEART—Normal.**LUNGS**—Dark shadow in apex of left lung.**STOMACH**—

Position, normal. Visible Peristalsis, present. Filling Defects, none. Incisura, none. Hypersecretion, not visible. Mobility (a) Stomach, normal; (b) Pylorus, moveable; (c) Duodenum, free. Tender Point, in epigastrium. Residue after six hours, slight. Empty in 8 hours.

SMALL INTESTINE—

Duodenum, empty in 10 hours. Ileum, empty in 22 hours.

LARGE INTESTINE—

Colon, empty in 30 hours.

COLON—Fluoroscopic Examination by Opaque Enema, normal..

Discussion.—The facts which we have before us in this case, and which we must endeavor to weave into a composite and definite diagnosis of an undoubted pathological condition, are numerous and somewhat contradictory. A pale haggard man looking much older than his years, a history of carcinoma, jaundice, gastric uneasiness, belching of gas, dizziness, loss of appetite, tenderness over the gall-bladder, and the most dominant symptom of all, the loss of forty-six pounds of flesh in four months, points unmistakably to the upper abdomen as the seat of whatever pathological lesion may be present. As for the lesion itself one cannot help but consider pancreatic cancer, cancer of the liver, of the gall-bladder or bile ducts, ulceration in either the stomach or duodenum or even cancer of the stomach itself.

Probably the better method to pursue is to arrive at a diagnosis by the process of elimination. Presuming this condition were due to pancreatic cancer, what local symptoms would we expect to find at examination in a case so far advanced as we find in this man? We would first

look for jaundice, which in the present instance is not marked, though should the growth be in the body or the tail, marked jaundice would not necessarily be present. Emaciation would be expected, and in this case it is marked.

A dull, aching or continuous pain, or one sharp lancinating and intermittent, radiating through to the back between the shoulder blades is an almost invariable accompaniment to cancer of the pancreas. In the case under consideration the discomfort experienced could scarcely be characterized as either. Though of the aching variety, it was not continuous, but only appeared after the partaking of food.

One of the most common accompaniments of pancreatic cancer is distention of the gall-bladder due to the damming back of bile. This is accomplished by the enlarged gland compressing the common duct. In some instances the gall-bladder will become enormously distended, reaching below the umbilicus, and even to the right iliac region. The liver is also frequently enlarged. In the present instance there was no enlargement of either gall-bladder or liver, the only symptom referable to either one or other of these organs being tenderness on palpation in this region.

Ascites, a frequent accompaniment of cancer of the pancreas, was absent.

Cachexia accompanied by emaciation was present, though the cachectic appearance was not sufficiently pronounced to lead one to believe in cancer from this symptom alone.

There was no palpable tumor in the epigastrium. Though this need not necessarily be present, yet in the advanced stage of whatever disease from which this man may be suffering, one would expect to find tumor, should the trouble prove to be cancer of the pancreas.

The stools were constipated, but contained neither free fat nor undigested meat fibres, two conditions frequently found in a person suffering from malignancy in the head of the pancreas.

Cancer in this location is almost invariably accompanied by albuminuria. This man's urine was normal.

In summing up the evidence in favor of pancreatic cancer, we find we are standing on very insecure ground. Though emaciation, cachexia and jaundice are present, yet they may also be found in cancer of the liver. In uncomplicated cancer of any of the other upper abdominal organs, jaundice would likely be absent.

In the absence of the characteristic pain, enlargement of the gall-bladder or liver, ascites and a palpable tumor, it appears fairly reasonable to exclude a malignant pancreas, and attempt to account for the jaundice, cachexia and emaciation in some other way.

Cancer of the hepatic or splenic flexures of the colon would be responsible for the great emaciation and cachectic appearance presented in this instance, but it would not produce the jaundice; the presence of which, and the absence of vomiting and symptoms of incomplete obstruction due to stenosis of the bowel at the seat of the disease, will permit us to readily pass this diagnosis by.

Stones in the common bile duct would readily be responsible for both the jaundice and the great loss of weight. It is not an uncommon thing for a heavy patient to lose from thirty to forty pounds in a few months in cases of cholelithiasis. Cholelithitic jaundice, however, is intermittent, while in this instance the jaundice was persistent. Cholelithiasis, too, has its own characteristic pain, usually sharp and lancinating, a symptom entirely foreign in this case. Moreover, cholelithiasis is very unlikely to produce the cachectic appearance so manifest in this instance.

Gastric or duodenal ulcer would not likely be responsible for these symptoms for many reasons. In the first place, great loss of weight could scarcely be occasioned without vomiting except in the presence of malignancy. Then, too, more of the typical symptoms of ulceration such as pain after eating, hyperchlorhydria, etc., have not been present. The only symptom pertaining to ulceration would be the frequency of the gaseous eructations and the uncomfortable epigastric sensation after meals. The complete absence of hematemesis or melaena would also help to throw the weight of the evidence against ulceration.

The diagnostic field is now very much narrowed, especially as the clinical picture would point very strongly toward malignancy. We have satisfied ourselves tentatively that it cannot be in either of the flexures of the transverse colon, and the weight of evidence is strongly against its presence in the pancreas. Of the remaining locations, the liver or the stomach would be the most probable.

Cancer of the liver is rarely a primary disease. As a general rule it is secondary to pyloric involvement. It is also frequently attended by nodules which can be readily palpated through the abdominal parietes. The jaundice is usually deep and persistent. In the absence of deep jaundice, in the absence of any nodular involvement, and especially in the absence of any previous history of gastric or duodenal ulceration providing a focus for the primary nodule, we are forced to the conclusion that the liver itself is not involved, or if so, only to a very slight degree.

As for the presence of cancer in the stomach itself, the weight of evidence is not at all conclusive. This man has never vomited, therefore there is as yet no pyloric obstruction. From this we observe that

the growth, if in the stomach at all, must be either very small, or at some distance from the pylorus. There is no palpable tumor, therefore if its presence is proved it will likely be of a small size. The gastric motility is not impaired. A test breakfast shows the presence of hydrochloric acid and the absence of lactic, but even in the presence of cancer this may be expected, as lactic acid is usually the result of food ferments due to retention as a result of pyloric obstruction. The presence of lactic acid very frequently means nothing more than that there is an obstruction at the pylorus, and as cancer is the most frequent cause of such obstruction, the presence of lactic acid usually means the presence of cancer. However, in this case there is no obstruction, therefore we would not expect to find lactic acid.

The clinical picture is indeed complex. A case of undoubted malignancy, and yet the exact location is very difficult to determine. Each of the likely locations have been carefully eliminated and we now have left but one—the stomach. There is in gastric carcinoma a peculiar facial expression which in many cases almost typifies the disease. The pinched, pale, wan expression often carries with it a conviction which cannot be adduced by obtainable facts. In this instance we have the facies of carcinoma, we have the dislike for food, we have the enormous loss of weight—46 pounds in four months—and after carefully eliminating all the other organs, even in the absence of pyloric obstruction and pain, we must come to the conclusion that in all probability we will find the seat of the disease either in the stomach or duodenum, and as primary duodenal cancer is indeed very rare, it will in all likelihood be discovered in the stomach itself.

Outcome.—On September 14th a median incision above the umbilicus revealed a carcinomatous nodule on the lesser curvature of the stomach, about one and one-half inches from the pylorus. The coronary chain of glands was greatly involved right up to the cardia, and the disease had spread into the gastro-hepatic omentum.

TWO.

Case No. 1112.	Date, Feb. 11, 1914.
Mr. L. E. _____	Address, N _____
Age, 58. Civil State, single.	Nativity, American.

CLINICAL HISTORY.

On February 11th, I was asked to see Mr. L. E. _____, of N_____. I found a man 58 years of age, somewhat emaciated, and whose whole body presented the appearance of pure saffron. This jaundice was deep, intense and abiding. Since its first appearance some two months previous, it had shown no signs of lightening, but had been steadily getting deeper. Icterus at times was intense. During the two months of his illness he had lost some fifteen pounds in weight. At the time of my

seeing him his pulse was 102, and temperature 103 deg. F. Although in a warm room he complained of feeling very cold, and insisted on having heavy blankets over him. From the nurse I could not learn that he had had any distinct and definite chills, but rather that he felt chilly all the time.

His previous history was easily obtained. A travelling salesman by occupation, he had always enjoyed the best of health. For the last fifteen years, however, he had suffered occasionally from severe cramps in the stomach, which he himself attributed to indigestion, but which on more than one occasion had been diagnosed by a physician as gall-stones. No sign of jaundice had ever followed any of these attacks. Of late years he had, in fact, been troubled much less in this way, and the trouble appeared to be wearing off. Apart from these spells he had never had any illness. His father and an uncle on his father's side had died from what was diagnosed as cancer of the stomach.

The present illness commenced about two months ago, and was ushered in by attacks of epigastric pain of a more serious nature than formerly, and the commencement of a slight tinge of jaundice, which gradually deepened into its present color. As the days passed by, the pain disappeared, until at the present time he had absolutely none whatever.

Physical examination revealed little. Deep palpation in the region of the liver elicited some tenderness, and the liver appeared to be somewhat enlarged, the lower border projecting about two inches below the right costal margin. There were no nodules. Gastric analysis revealed nothing. The heart was normal. Slight albuminuria was present. There was no palpable tumor and no ascites. The total leucocytosis was 21,400, of which 88 per cent. were polymorphonuclears.

PHYSICAL EXAMINATION.

HEART—Normal.

LUNGS—Normal.

ABDOMEN—Liver dulness extended about two inches below right costal margin. Deep palpation elicited tenderness in region of the gall-bladder.

CLINICAL EXAMINATION.

URINE—

Amount in 24 hours, 38 ozs. Color, light straw. Odor, none. Sediment, none. Reaction, acid. Sp. Gr., 1016. Albumin, present. Sugar, none.

Microscopical Examination—

Pus, none. Blood, none. Crystals, none.

Tube Casts—

Epithelial, none. Blood, none. Granular, none. Hyaline, none.

BLOOD—

Hemoglobin—Dare (85%). Temperature, 103. Pulse, 102.

Blood Pressure—Systolic, 120 (Normal 100-120 mm.) Diastolic, 90 (Normal 75-95 m.)

Red Cells—No. 4,800,000 per cu. mm. (Normal, Men 5,000,000, Women 4,500,000.)

White Cells—No. 21,400 per cu. mm. (Normal 7,500.)

Differential Count of 460 Leucocytes.

Small Lymphocytes, 20% (Normal 22-25). Large Lymphocytes, 3% (Normal 3-6).

Large Mononuclear Leucocytes, 2% (Normal 1-2). Transitional Forms, 1% (Normal 1-2).

Polymorphonuclear Neutrophils, 88% (Normal 70-72). Eosinophiles, 2% (Normal 2-4).

GASTRIC ANALYSIS—

Gastric Extract. Meal given, toast and tea. Quantity Removed, 4 ozs.
Food Remnants, none. Blood, none. Tissue Bits, none.

Chemical Examination—

Reaction, acid. Total Acidity, 60. Free H.C.L., present. Combined
H.C.L. Total H.C.L. Lactic Acid, absent. Altered Blood,
none. Bile, none.

Microscopical Examination—

Micro-Organisms. B. Oppler Boas, none. Yeasts, none. Sarcines, none.

X-RAY (FLUOROSCOPIC EXAMINATION).

HEART—Normal.

LUNGS—Normal.

STOMACH—

Position, normal. Visible Peristalsis, present. Filling Defects, none
visible. Incisura, none visible. Hypersection, none visible. Mobility:
(a) Stomach, normal; (b) Pylorus, free; (c) Duodenum, free. Tender
Point, in region of gall bladder. Residue after six hours, none. Empty
in 6 hours.

SMALL INTESTINE—

Duodenum, empty in 13 hours. Ileum, empty in 20 hours.

LARGE INTESTINE—

Colon, empty in 32 hours.

COLON—Fluoroscopic Examination by Opaque Enema, apparently normal.

Discussion.—In the discussion of any disease in which the body is deeply jaundiced we must commence on the hypothesis that the bile-ducts are involved to a greater or lesser extent. We may be facing any one of numerous conditions. This patient may be suffering from a purely catarrhal jaundice, he may have cirrhosis, he may have pancreatic cancer, cancer of the gall-bladder or bile-ducts, cancer of the liver itself, abscess of the liver, or even a benign or malignant growth entirely outside the biliary tract, but producing compression enough to produce the pigmented color of the skin here shown.

Should this condition prove to be due to a growth outside the liver or biliary tract, what form of new growth would we naturally expect to find? Obviously only one—pyloric cancer. In the case under consideration there is neither palpable growth nor any history which would even lead one to expect its presence. There has never been even the slightest suspicion of gastric or duodenal ulcer, the seed bed of cancer in this location. Stomach contents are normal. There has been no vomiting. The condition is obviously not due to pressure from without.

Cancer of the liver, the suspicion for which may have existed, can with greater difficulty be eliminated. Cancer of the liver is usually secondary to pyloric cancer, and as this has been definitely eliminated, malignancy, if present, must be primary. This we know to be occasionally true. Even without any primary focus, therefore, malignancy may exist in the liver substance.

The liver is enlarged to two inches below the costal margin, but it is smooth. No nodules can be felt. There is no abdominal distention. There are no enlarged superficial veins. There is no œdema of the feet. There is no anæmia. Though in hepatic malignancy, ascites is not necessarily present, yet in the majority of cases it is present as a result of pressure by nodules on the portal vein, or extension of the cancer to

the peritoneum. In the case under consideration there is no ascites. Furthermore, although this man is running a temperature of 103 deg. F., a symptom thoroughly consistent with cancer, yet the jaundice is of a much greater degree of intensity than is usually found in this condition. His appearance is not typically cachectic. We may, therefore, with comparative safety, rule out malignancy in the liver.

Cancer of the pancreas would almost immediately suggest itself, but in the absence of enlarged gall-bladder, of epigastric pain, of ascites, of cathexia, of free fat or undigested meat fibres in the feces, may be eliminated.

Simple catarrhal jaundice is contra-indicated by the fact that the pigmentation has remained so long. In jaundice due to simple catarrh of the biliary passages, the discoloration is usually entirely cleared up in from two to four weeks.

In cirrhosis of the liver, jaundice is usually slight, the skin being more of a sallow complexion. The spleen is usually enlarged. A history of alcoholism can almost invariably be obtained. Hemorrhage from the stomach or bowels is a frequent accompaniment of cirrhosis. Ascites is frequently well marked. A facial expression known as the facies hepatica is very common in cirrhosis of the liver. The face is thin, the eyes are watery and sunken, the nose and cheeks show distended venules, which, coupled with the usually slightly jaundiced appearance, presents a picture truly typical of cirrhosis. Albuminuria is common, and fever ranging from 101 to 103 deg. F. is frequently present.

This man presents the albuminuria, the fever, the jaundice and a facial expression which might be mistaken for the hepatic facies; but in the absence of a history of alcoholism, of splenic enlargement, of hematemesis or melaena, and of ascites, we are fairly safe in excluding cirrhosis.

There are remaining but two pathological conditions which are at all likely to produce the present symptoms, gall-stones in the common duct, and abscess of the liver, and many of the symptoms would appear to be associated with both of these conditions.

The attacks of epigastric pain from which this patient has suffered for some years past, the sudden onset and just as sudden cessation, even if not succeeded by jaundice, would certainly indicate the presence of gall-stones. The present loss of weight would also be thoroughly consistent with the presence of stones. The chilly feeling and the temperature are common accompaniments to common duct cholelithiasis. The character of the jaundice, however, is not that which usually accompanies an obstruction in the common duct due to stone. In simple stone obstruction the jaundice is intermittent, I might almost go so far as

to say never continuous, and this one point alone may be considered sufficient to rule out stone as the only cause of the present pigmented condition of the skin.

Abscess of the liver, though seldom productive of such intense jaundice, yet would account for its persistency. The toxæmia resulting from abscess would, or could, be responsible for the loss of weight. His persistent chilly feeling, and his temperature of 103 would readily result from pus formation. This patient's leucocytosis was 21,400, with a polymorphonuclear percentage of 88, strong presumptive evidence of pus accumulation, and furthermore, by the high percentage of polymorphonuclear cells, showing a greatly weakened resistance.

A tentative diagnosis of gall-stones complicated by hepatic abscess was made. Operation appeared hopeless and was not urged.

Outcome.—On March 4th autopsy revealed an acute suppurative cholangitis. No stones whatever were present. Suppuration had spread up the hepatic duct and reached to its farthest ramifications in the liver, causing multiple abscesses throughout. No cause was discovered which would be accountable for the preliminary infection.

THREE.

Case No. 1101.	Date, Jan 30, 1914.
Mr. P. A. _____	Address, M_____
Age, 48. Civil State, married.	Nativity, Canadian.

CLINICAL HISTORY.

On January 30, I was asked by his physician to see Mr. P. A. —, of M—, A man forty-eight years of age and a moderate drinker was suffering from a severe pain in the left upper abdomen. He had been confined to his bed for three weeks, and, according to the report of his friends, had lost much weight during that time. When in normal health his weight had for years ranged about 160 pounds; there was no means of weighing him at present, but he had apparently lost somewhere in the neighborhood of twenty pounds. The loss of this weight, however, had not all taken place during the three weeks he had been in bed, but rather from the commencement of his present illness, some six months previous. His complexion was pale and sallow, he was worried over his present condition, his anxiety being continually manifested by his actions and numerous questions regarding his condition.

He gave a perfectly clear preliminary history. With the exception of the usual diseases of early childhood, and pneumonia at the age of twenty-two, he had never before been ill. Eighteen months ago, while on a high ladder picking apples, he had suddenly lost his balance, and on falling to the ground, a distance of nine or ten feet, had struck his side against a scantling lying across the top of an apple barrel. This occasioned him considerable pain at the time, and on many occasions

subsequently a severe stitch would suddenly seize him in the location of the former injury—just below the left costal margin.

For twelve months, however, no ill-effects were anticipated, but about this time he first consulted a physician for loss of appetite and a general feeling of lassitude. Subsequently diarrhoea developed, which, however, was of a very intermittent character, and on three or four occasions the stools were black and tarry as though they might contain some blood, but no such stool had been passed for the past five months.

Two months ago he had discovered a hardness in the left side of the abdomen, which in the meantime had given him a good deal of trouble. The pain was of a dull, boring, aching character, and appeared to be persistently worse at night.

Physical examination revealed only a slight degree of emaciation. The entire body had a sallow tinge and there was a rounded fullness to the abdomen. In the upper left quadrant of the abdomen could readily be found a round hard mass, in size slightly smaller than a cocoanut. Pressure on, or in the neighborhood of this mass, elicited but the slightest degree of tenderness, but in its region he suffered much from a constant boring ache. There was no spasmodic pain. There was no diarrhoea. There was no blood in the stools. The bowels moved every day, sometimes without and sometimes only by the use of a laxative. There was an occasional attack of nausea, occasionally accompanied by slight vomiting. The appetite was poor, the tongue was furred, the stools were foul. The heart, the lungs, the urine and the blood were normal. There was no history of cancer in the family.

PHYSICAL EXAMINATION.

HEART—Normal.

LUNGS—Normal.

ABDOMEN—Slight general distention with a rounded hard mass in upper left quadrant.

CLINICAL EXAMINATION.

URINE—

Amount in 24 hours, 38 ozs. Color, amber. Odor, none. Sediment, none. Reaction, acid. Sp. Gr., 1018. Albumin, none. Sugar, none.

Microscopical Examination—Pus, none. Blood, none. Crystals, none.

Tube Casts—Epithelial, none. Blood, none. Granular, none. Hyaline, none.

BLOOD—

Hemoglobin—Dare (90%). Temperature, 99. Pulse, 84.

Blood Pressure—Systolic, 120 (Normal 100-120 mm.) Diastolic, 90 (Normal 75-95 mm.)

Red Cells—No., 4,000,000 per cu. mm. (Normal, Men 5,000,000, Women 4,500,000).

White Cells—No. 8,000 per cu. mm. (Normal 7,500).

Differential Count of 460 Leucocytes—

Small Lymphocytes, 22% (Normal 22-25). Large Lymphocytes, 4% (Normal 3-6).

Large Mononuclear Leucocytes, 2% (Normal 1-2). Transitional Forms, 1% (Normal 1-2).

Polymorphonuclear Neutrophiles, 74% (Normal 70-72). Eosinophiles, 2% (Normal 2-4).

GASTRIC ANALYSIS—

Gastric Extract. Meal given, toast and tea. Quantity Removed, 4 ozs.
Food Remnants, none. Blood, none. Tissue Bits, none.

Chemical Examination—

Reaction, acid. Total Acidity, 52. Free H.C.L., present. Combined
H.C.L. Total H.C.L. Lactic Acid, none. Altered Blood,
none. Bile, none.

Microscopical Examination—

Micro-Organisms. B. Oppler Boas, none. Yeasts, none. Sarcines, none.

X-RAY (FLUOROSCOPIC EXAMINATION).

LUNGS—Normal.

HEART—Normal.

STOMACH—

Position, normal. Visible Peristalsis, present. Filling Defects, none.
Incisura, none. Hypersecretion, not visible. Mobility: (a) Stomach,
normal; (b) Pylorus, quite free; (c) Duodenum, moveable. Tender Point,
in region of splenic flexure. Residue after six hours, very slight. Empty
in 7 hours.

SMALL INTESTINE—

Duodenum, empty in 11 hours. Ileum, empty in 20 hours.

LARGE INTESTINE—

Colon, empty in 42 hours.

COLON—Fluoroscopic Examination by Opaque Enema. On account of the perceptibly palpable mass in the region of the splenic flexure, particular attention was paid to the fluoroscopic examination of the colon, but nothing which would add any light on the diagnosis was perceived. There was no perceptible narrowing of the lumen of the bowel.

Discussion.—The picture we have before us is one which presents considerable difficulty in deciphering. There are no clear-cut typical symptoms which would warrant one in readily arriving at a definite conclusion. We have evidence which on the surface would indicate one of many conditions, among which may be mentioned new growth in the peritoneum of either tubercular or malignant origin, enlargement of the spleen, cancer of the splenic flexure of the colon, cancer of the stomach, localized peritonitis with the possibility of abscess formation, or even chronic enlargement of the spleen due to cirrhosis of the liver.

A short analysis will suffice to eliminate at least some of these conditions. The presence of localized peritonitis in this location is likely to be induced by one of three conditions, perforation of a gastric ulcer, carcinoma of the stomach, or trauma.

A localized inflammation in this region in the greater peritoneal cavity is rare—in the lesser, somewhat more frequently found. This is accounted for by the anatomical relationship of the structures permitting the collection and localization of an inflammatory exudate in the lesser cavity. It lies behind the gastro-hepatic omentum, behind and below the stomach, and behind the anterior layer of the great omentum. The upper layer of the transverse meso-colon forms the lower limit of the space. It reaches from the Foramen of Winslow to the spleen, it reaches from the hepatic to the splenic flexures of the colon. The transverse fissure of the liver and a portion of the diaphragm form the upper limit. It will readily be seen, therefore, how an inflammatory exudate into the lesser sac would produce a tumor consistent with the one under consideration. But is this what has occurred? True it is that we have the history of an injury which would readily be responsible

had this tumor occurred at a much earlier date and very shortly after the accident. But here we have a period of eighteen months elapsing, and not until six months ago was there any indication or even suspicion of serious trouble supervening. The lapse of twelve months before the onset of severe symptoms would be sufficient to rule out trauma as the cause. Cancer of the stomach or a perforated gastric ulcer could readily be responsible for the existing condition, but there is not the slightest evidence of the presence of either cancer or ulcer. Furthermore, the symptoms produced by the perforation of an ulcer of the stomach into the lesser peritoneal cavity are entirely wanting. In the latter case we have the onset sudden and abrupt. The pain is intense, and the vomiting often copious and bilious. Owing to involvement of the diaphragm the respirations are frequently embarrassed. Obviously ulcer cannot have been responsible for the present condition; the typical symptoms are wanting, the lapse of time is too great.

An omental tumor, whether it be tuberculous or malignant, early becomes adherent to the abdominal wall. It is also accompanied by ascites and progressive emaciation. This tumor is apparently non-adherent. There is no ascites.

Regarding new growths in the peritoneum, two forms may be considered in connection with this case, tuberculosis and cancer. Either may develop as the result of an injury, or rather the commencement of the disease may coincide with the occurrence of an injury.

If tuberculous peritonitis is present in this instance, it must be of the chronic variety. What symptoms would we expect to find? Ascites, though probably with but a small effusion, the fluid sometimes being hemorrhagic. In a long-standing case such as this, tympanites may be present as the result of adhesions between the parietal and visceral layers. In the chronic form the temperature is frequently subnormal, often for days at a time running as low as 97 degrees. The simultaneous presence of pleurisy is frequent. One of the most marked features of this disease is the presence of a tumor either by simulation or in reality, in which latter case it is due to the rolling of the omentum into a ball, to the collection of fluid which is confined between the coils of intestines by adhesions, or in somewhat rare cases by the actual thickening and retraction of the intestinal coils themselves.

In the present case we have not the characteristic ascites, nor temperature, nor tympanites, nor pleurisy. We have the tumor alone.

Is it peritoneal cancer? Secondary malignant peritonitis is comparatively common, primary very rare indeed. In fact, it is open to question if primary peritoneal carcinoma ever exists, that which is usually mistaken for it being in reality endothelioma.

As in tuberculous peritonitis, so in cancer we have a mass, usually in the upper abdomen, and associated with ascites. In tuberculosis it is formed by the rolling up of the great omentum; in cancer by spreading induration of the omentum from the primary focus, usually in the stomach.

With the history of a primary focus, the diagnosis of peritoneal malignancy is comparatively easy; in the absence of such focus, very doubtful. We have here neither primary cancer nor ascites. We are not likely to have peritoneal cancer.

Splenic enlargement may be the result of various causes, such as leukemia, pernicious anemia, pseudoleukemia, chronic malaria or syphilis. Chronic enlargement of the spleen is sometimes occasioned by cirrhosis of the liver.

The recognition of certain physical signs will almost invariably result in a definite diagnosis of splenic enlargement; the retention of its notched anterior border, the position of the organ anterior to the colon, and its retention of respiratory mobility; it is not fixed. Our tumor is evidently not splenic.

Cancer of the intestines is often primary. We have here a case of tumor in the region of the splenic flexure of the colon. He has a history of early diarrhoea, to be followed later by obstinate constipation, and later still by diarrhoea and constipation alternating. He has a history of blood in the stools early in the disease, though none has appeared for some months.

He has a great deal of pain concentrating at the seat of the tumor, is emaciated and has a sallow complexion. He has a mild degree of tympanites.

A diagnosis of cancer in this region must be made on general as well as localized symptoms. He has anemia, he has a certain degree of cachexia, he is forty-eight years of age. He has no visible signs of stenosis as would be observed by visible peristalsis or ribbon-like stools, but he has alternating spells of constipation and diarrhoea. Ribbon-like stools would not be expected in this case, because the obstruction, if such it be, is too high in the bowel.

With all other possible conditions having one by one been carefully eliminated, and yet fully appreciating the impossibility of making a definite diagnosis in an abdominal case so obscure as this appears to be, a tentative diagnosis of cancer of the splenic flexure was made.

Outcome.—On February 4th exploratory laparotomy revealed an irremovable mass enveloping the splenic flexure, a section of which proved to be carcinoma.

FOUR.

Case No. 1131.	Date, March 21, 1914.
Mr. T. A. _____	Address, H_____
Age, 59. Civil State, married.	Nativity, Canadian.

CLINICAL HISTORY.

Mr. T. A. _____, of H_____, aged 59 years. Along with his physician I examined this gentleman on March 23rd. A man who one year before, the picture of health and strength, had weighed one hundred and seventy-eight pounds, now at one hundred and thirty-seven pounds, presented a very dejected appearance indeed. His eyes were sunken, his expression was pinched, his skin was flabby, his energy was gone. Though he was not distinctly jaundiced, yet the color of the skin presented a slightly jaundiced hue. The same condition was more marked in the sclera.

At twenty-eight years of age he had suffered a severe illness from "inflammation of the bowels," which had kept him in bed one month, and again at thirty-six years he had a similar attack, though of much less severity than the former one. There was no history of tuberculosis in the family. His father had died of cancer of the stomach.

The history of the present illness dates back one year. At that time he began to suffer periodical attacks of pain in the right hypochondriac and epigastric regions, which apparently were in no way related to the partaking of food. For a time they were severe, then eased off for a short period only to return with greater severity. At times these attacks would appear every day, then again several days might pass without any symptoms whatever.

As the months passed by these attacks increased in both frequency and severity, until for the past three weeks he had been given at least one-half grain of morphia hypodermically at the commencement of each attack. Nothing short of that amount afforded any relief. Diarrhoea and obstinate constipation alternated.

During the past four months vomiting spells had frequently accompanied the attacks of pain, in fact, on many occasions he received no relief until after a copious emesis. The vomiting was usually dark green—a typical bilious vomit. As far as I could learn, it, too, had no relation to meals.

Physical examination revealed a somewhat rounded abdomen, slightly tympanitic and slightly tender throughout. The point of maximum tenderness appeared to be in the right hypochondriac and epigastric regions, and from this point radiated throughout the abdomen. No tumor or mass of any description could be discovered. The heart was normal, the lungs were sound, the urine presented no evidence of renal

disease. There was no blood in the stools, they were of normal color, there was no hematemesis. Pulse, 78, temperature 98 4-5, respiration 22.

PHYSICAL EXAMINATION.

HEART—Normal.

LUNGS—Normal.

ABDOMEN—Slightly rounded and tympanitic. Entire abdomen was tender, but particularly so in the region of the right hypochondrium.

CLINICAL EXAMINATION.

URINE—

Amount in 24 hours, 46 ozs. Color, amber. Odor, none. Sediment, none. Reaction, acid. Sp. Gr., 1014. Albumin, none. Sugar, none.

Microscopical Examination—

Pus, none. Blood, none. Crystals, none.

Tube Casts—

Epithelial, none. Blood, none. Granular, none. Hyaline, none.

BLOOD—

Hemoglobin—Dare (95%). Temperature, 98 4-5. Pulse, 78.

Blood Pressure—Systolic, 100 (Normal 100-120 mm.) Diastolic, 90 (Normal 75-95 mm.)

Red Cells—No. 5,200,000 per cu. mm. (Normal, Men 5,000,000. Women 4,500,000.)

White Cells—No. 6,000 per cu. mm. (Normal 7,500.)

Differential Count of 520 Leucocytes.

Small Lymphocytes, 20% (Normal 22-25). Large Lymphocytes, 3% (Normal 3-6).

Large Mononuclear Leucocytes, 1% (Normal 1-2). Transitional Forms, 2% (Normal 1-2).

Polymorphonuclear Neutrophils, 74% (Normal 70-72). Eosinophiles, 2% (Normal 2-4).

GASTRIC ANALYSIS—

Gastric Extract. Meal given, toast and tea. Quantity Removed, 4 ozs.

Food Remnants, none. Blood, none. Tissue Bits, none.

Chemical Examination—

Reaction, acid. Total Acidity, 58. Free H.C.L., present. Combined

H.C.L. Total H.C.L. Lactic Acid, none. Altered Blood, none. Bile, none.

Microscopical Examination—

Micro-Organisms. B. Oppler Boas, none. Yeasts, none. Sarcines, none.

X-RAY (FLUOROSCOPIC EXAMINATION).

HEART—Slight hypertrophy.

LUNGS—Normal.

STOMACH—Position, normal. Visible Peristalsis, present. Filling Defects, none. Incisura, none. Hypersecretion, not visible. Mobility (a) Stomach, normal; (b) Pylorus, freely movable; (c) Duodenum, moveable. Tender Point, very tender in region of epigastrium and right hypochondrium. Residue after six hours, none. Empty in 6 hours.

SMALL INTESTINE—

Duodenum, empty in 9 hours. Ileum, empty in 30 hours.

LARGE INTESTINE—

Colon, empty in 44 hours.

COLON—Fluoroscopic Examination by Opaque Enema, nothing abnormal.

Discussion.—We have here a man slightly jaundiced, somewhat emaciated, and looking withal as though his days may be numbered. He has severe epigastric and right hypochondriac pain, spasmodic in character and yielding only to large doses of morphia. This pain strikes him unawares, without the slightest previous warning. It is in no way related to food. Vomiting sometimes gives relief. No tumor is palpable. Diarrhœa and constipation alternate.

What pathological condition will produce the above picture? It may be one of many. It may be the result of pyloric spasm due to gallstones, or appendicitis or tuberculosis of the caecum. It may be pyloric cancer. It may be cancer of the hepatic flexure of the colon. It may be ulceration in the gastric or duodenal mucous membrane. It may be cancer of the pancreas.

There are many reasons why we should first consider the possibility of cancer in the pancreas. He is slightly paunched. In pancreatic cancer this jaundice need not necessarily be deep. In 25 per cent. of all cases, the pancreatic portion of the common bile duct is not enveloped by the substance of the gland, but rather lies in a groove on its posterior surface. In these cases malignancy may be far advanced without completely occluding the duct, and the consequent jaundice may be only slight.

When epigastric pain is the result of malignancy in this location it may be of two different varieties, either a dull continuous ache, or intermittent, severe and agonizing. Vomiting does not usually give complete relief, in fact, vomiting may not be present. In the case in point the pain is intermittent, it is severe, it is agonizing. Vomiting sometimes gives complete relief, which, coupled with the fact that the pain is almost as severe in the right hypochondrium as in the epigastrium, would not have a tendency to substantiate pancreatic cancer. He is thin, he has lost forty-one pounds in the last year, which, coupled with the jaundice and pain, looks suspicious, and yet he has no distention of the gall-bladder, he has no ascites, he is not cachectic in appearance, he has no palpable tumor in the epigastrium, and furthermore no undigested meat fibres could be found in the feces. These are conditions which we would expect to find before we could definitely pronounce cancer present. It would appear from this that the weight of evidence was negative rather than positive.

As to gastric or duodenal ulcer, there is little evidence. He has the pain, the vomiting, the emaciation. The pain, however, is not definitely related to meals. Furthermore, there is jaundice. There has been no melæna, there has been no hematemesis. The possibility of ulceration, therefore, must be very slight.

In considering the possibility of malignancy in the hepatic flexure of the colon we must remember that tumor is a late symptom, and that diagnosis, in order to give prospects for complete relief, must be made in its absence. The diagnosis must be made from a combination of general and local symptoms. If there is increasing anæmia, if there is any cachexia, and if the patient is above forty years of age, malignancy, in the absence of any other apparent cause, must be suspected.

In cancer of the hepatic flexure we would expect to find stenosis, obstinate constipation, pain, ascites, cachexia, and emaciation.

Stenosis at some point in the alimentary canal is evidently present, as evidenced by the fact that vomiting is frequent and that it almost always gives relief. Obstinate constipation is not necessarily always present in cancer of the intestine, in fact, is frequently alternates as in

the present case with excessive diarrhoea. Emaciation is also present in this case.

Two symptoms which we would expect to find are absent, ascites and cachexia. As these are very important, one would in their absence be very loath to pronounce carcinoma of the intestine. One further condition, the presence of slight jaundice, would at least lead one to look for implication of the biliary tract in the location of the disease.

Is this clinical picture due to pyloric spasm, and if so, what is the direct cause of the spasm? We know of four definite pathological conditions which will produce spasm of the pylorus—appendicitis, cecal tuberculosis, gall-stones and malignancy of the pylorus itself.

At twenty-eight years of age, and again at thirty-six, this man had suffered from inflammation of the bowels. In the first attack he nearly died. Was one, or were both of these illnesses due to appendicitis? The first attack was thirty-one years ago, and the second twenty-three. At that time appendicitis as a disease was practically unknown. We now know that ninety per cent. of all cases of acute peritonitis in the male are directly due to appendicitis. It would appear that we are quite safe in supposing that these two attacks were due to a common cause—the appendix. It is now twenty-three years since the last attack. During these intervening years no symptom of appendiceal trouble had appeared. It would not therefore appear likely that this condition, even if pyloric spasm, could be caused by the appendix.

Are there any symptoms of cecal tuberculosis which might produce such a spasm? In tuberculosis of the ileocecal region we would expect to find a tumor, fixed, hard and more sensitive to pressure than a carcinoma. We would also look for periodical attacks of severe pain and alternating diarrhoea and constipation, as a result of the enterostenosis which must be present. It is quite rare to find acute obstruction of the bowel supervene in this condition. We would expect to find fever in moderation with evening exacerbations and morning remissions. We would expect less emaciation than in carcinoma.

This gentleman has the periodical attacks of pain, he has the alternating diarrhoea and constipation, he has the emaciation; he has not the tumor, he has not the fever, and furthermore the symptoms are referred to a point in the abdomen considerably higher than the ileocecal region.

Pyloric cancer? There is no history of preceding ulceration in either the stomach or duodenum. There has never been any melæna, there has never been any hematemeses. The stomach is not dilated, therefore there can be no pyloric obstruction, which would to a certainty be present after one year's presence of cancer in that region. There is

no tumor in the region of the pylorus, which after the disease has been in progress for twelve months, one would naturally expect to find. Altogether we cannot even suspect pyloric cancer.

Have we before us a case of gall-stones? Though the symptoms are obscure and some of them at least apparently misleading, the weight of the evidence must certainly favor the presence of concretions in the biliary tract. The loss of forty-one pounds of flesh it not at all inconsistent with the presence of gall-stones. The periodical epigastric pain, sudden, lancinating and bearing no relation to meals, would lend strength to the opinion of gall-stone colic. Vomiting frequently relieved the pain, a symptom of importance in the diagnosis of gall-stones. Pancreatic cancer has been ruled out. Jaundice is present, and its presence can best be accounted for by the presence of gall-stones as the most likely cause of biliary obstruction with the foregoing clinical picture and attendant history. A diagnosis of gall-stones was accordingly made.

Outcome.—On March 27th, abdominal section revealed a normal stomach and duodenum, a normal gall-bladder and biliary tract, a normal pancreas. A band of adhesions, firm and strong as a large cord, passed from the base of the appendix across the ascending colon, narrowing its lumen to at least one-quarter its natural size. The appendix itself was buried in dense adhesions. After removal of the fibrous band constricting the colon, and appendectomy, the pain ceased, the vomiting stopped and he began to put on flesh rapidly. No cause whatever was found for the jaundice. After operation it, too, cleared up, so that it must have been simply catarrhal.

FIVE.

Case No. 1168.

Miss A. S. _____

Age, 18. Civil State, single.

Date, May 12, 1914.

Address, M_____

Nativity, American.

CLINICAL HISTORY.

When on May 12th, I saw with her physician, Miss A. S. _____, of M_____, I found a young woman of eighteen who for the past three years had been able to do practically nothing through chronic invalidism. I found her very much wasted in flesh. At fifteen, the picture of health, she had weighed one hundred and sixteen pounds. At the present time she scarcely tipped the scales at eighty-four. She was pale, haggard and worn, was sad and dejected in appearance, and as a result of long-continued ill-health, she had become more or less despondent.

Her previous history is soon told. Shortly after her fifteenth birthday she had commenced to suffer from vague, indiscriminate wandering pains throughout the abdomen. She became slightly constipated, suffered from headaches, from loss of appetite and insomnia. This vague

abdominal pain was somewhat periodical in character. For a week she would suffer much, then for the next fortnight would be apparently quite well.

After six months of repeated attacks such as this, her physician thought best to remove the appendix, under the impression that this organ might be the offending one. Appendectomy was followed by a repetition of the same symptom as previously. No benefit whatever was experienced.

From this time on her weight gradually decreased. When the attacks came on she would remain in bed for a week, then until the appearance of the next seizure, some two, three or four weeks hence, would be about the house in comparatively good health. At seventeen she weighed just one hundred pounds. The vague, wandering pain of heretofore had become more definitely settled in her right side just above McBurney's point. Tenderness on pressure was not marked in the region of the pain, but lower in the abdomen, just above the pubes, pressure on the right side elicited considerable tenderness. Bi-manual examination revealed nothing. Rest in bed, free purgation, and evaporating lotions at this time accomplished much good, so that the lower abdominal pain had quite disappeared.

For the succeeding year she gradually lost flesh, the periodical attacks of pain became more frequent and severe, and the outlook for the future looked very discouraging. On May 12th I saw her presenting the appearance above described.

Physical examination revealed a wasted frame and a tender abdomen. Tenderness was general throughout the entire abdominal cavity, though the point of maximum tenderness appeared to be in the right lumbar region. Pressure here elicited great pain. The right hypochondriac region was tender only to a lesser degree than the right lumbar. The abdomen was scaphoid. Some rigidity was present in the right rectus throughout its entire course. The heart and lungs were normal. The urine showed no evidence of kidney disease. The stools were normal in color, and microscopical examination revealed nothing abnormal in any way. There had never been any melæna, there had never been any hematemesis, there had never been any vomiting. No undigested food remained in the stomach, there was no motor insufficiency, there was no gastric dilatation. A test meal revealed free hydrochloric acid. Temperature and pulse normal.

PHYSICAL EXAMINATION.

HEART—Normal.

LUNGS—Normal.

ABDOMEN—Tenderness throughout entire abdomen—most severe in right lumbar region. Scaphoid abdomen.

CLINICAL EXAMINATION.

URINE.

Amount in 24 hours, 40 ozs. Color, amber. Odor, none. Sediment, none. Reaction, acid. Sp. Gr., 1020. Albumin, none. Sugar, none.

Microscopical Examination—

Pus, none. Blood, none. Crystals, none.

Tube Casts—

Epithelial, none. Blood, none. Granular, none. Hyaline, none.

BLOOD—

Hemoglobin—Dare (90%). Temperature, 98. Pulse, 74.

Blood Pressure—Systolic, 120 (Normal 100-120 mm.) Diastolic, 85 (Normal 75-95m.)

Red Cells—No. 4,400,000 per cu. mm. (Normal, Men 5,000,000. Women 4,500,000).

White Cells—No. 7,400 per cu. mm. (Normal 7,500).

Differential Count of 620 Leucocytes.

Small Lymphocytes, 22% (Normal 22-25). Large Lymphocytes, 4% (Normal 3-6).

Large Mononuclear Leucocytes, 1% (Normal 1-2) Transitional Forms, 1% (Normal 1-2).

Polymorphonuclear Neutrophils 70% (Normal 70-72). Eosinophiles, 3% (Normal 2-4).

GASTRIC ANALYSIS—

Gastric Extract. Meal given, toast and tea. Quantity Removed, 3½ ozs. Food Remnants, none. Blood, none. Tissue Bits, none.

Chemical Examination—

Reaction, acid. Total Acidity, 58. Free H.C.L., present. Combined H.C.L. Total H.C.L. Lactic Acid, none. Altered Blood, none. Bile, none.

Microscopical Examination—

Micro-Organisms. B. Oppler Boas, none. Yeasts, none. Sarcines, none.

X-RAY (FLUOROSCOPIC EXAMINATION).

HEART—Normal.**LUNGS**—Normal.

STOMACH—Position, Normal. Visible Peristalsis, present. Filling Defects, none. Incisura, none. Hypersecretion, not visible. Mobility: (a) Stomach, normal; (b) Pylorus, normal; (c) Duodenum, slightly fixed. Tender Point, most acute in right lumbar region. Residue after six hours, none. Empty in 5 hours.

SMALL INTESTINE—

Duodenum, empty in 8 hours. Ileum, empty in 18 hours.

LARGE INTESTINE—

Colon, empty in 30 hours.

COLON—Fluoroscopic Examination by Opaque Enema, normal.

Discussion.—In the face of the foregoing history it is readily seen that arriving at a diagnosis in this case is no easy matter. The picture is complex. An original diagnosis of chronic appendicitis had been made and the appendix removed with no apparent benefit. One year before, there had been great pain and muscular rigidity in the region of the right ovary, but under appropriate treatment this seeming exacerbation had rapidly cleared up, so that any complications in this portion of the abdomen may be readily dismissed. She had periodical pain in the right hypochondriac and right lumbar regions, accompanied by some rigidity. Now what conditions are, along with the other symptoms manifested by the patient, likely to be the cause of her present condition? We must consider tuberculosis of the caecum, gastric or duodenal ulcer, incomplete obstruction of the intestine due to adhesions, chronic pancreatitis, gall-stones and spasm of the pylorus.

Tuberculosis of the caecum is a common cause for pyloric spasm producing just such symptoms as this girl present. Caecal tuberculosis, however, would long before the lapse of the three years during which this girl had been ill, have produced a definite and prominent tumor.

In tuberculosis of the caecum, the tumor which invariably develops is hard and nodular, is usually fixed, and presents very evidence of a carcinomatous growth. On palpation one point must be emphasized, a tumor the result of tuberculosis in this portion of the bowel is likely to be somewhat more tender to the touch, than one the result of cancer. Her periodical attacks of severe pain looked very much indeed like the result of an enterostenosis, which always accompanies ileocecal tuberculosis. This disease is almost invariably accompanied by fever. This girl had none, the absence of a tumor after the trouble had progressed three years would be evidence sufficient to rule out tuberculosis as the cause of this disease.

It looks as though the differentiation must be made between gastric or duodenal ulcer and gall-stones.

Her symptoms do not point to the typical history of ulcer. She has free hydrochloric acid, which we would expect, but she has no vomiting, she has had neither hematemesis nor malæna, she has never had the typical pain one, two or three hours after meals, the pain she suffered was never in any way related to the partaking of food, partaking of a meal never had any tendency to relieve the pain. Under these circumstances it seems fairly reasonable to exclude ulceration.

As for gall-stones the symptoms are more typical. The pain is ushered in suddenly, has no relation to food and passes away just as suddenly. The character of the pain had the typical appearance of gall-stone colic. Her great loss of weight would be thoroughly consistent with gall-stones. Her age, however, would speak against this, as the presence of gall-stones under twenty years of age is very uncommon. The weight of the evidence was all in favor of gall-stones, and this diagnosis was accordingly made.

Outcome.—On may 15th laparotomy revealed on the anterior wall of the duodenum an ulcer the size of an ordinary ten-cent piece. Its base was very thin, almost on the point of perforating. The gall-bladder and ducts were normal. Infolding of the ulcer and posterior gastroenterostomy effected a rapid cure. In three months she had regained twenty pounds.

Case No. 1197.	SIX.	Date, Aug. 20, 1914.
Miss D. T. _____		Address, L_____
Age, 23.	Civil State, single.	Nativity, Canadian.

CLINICAL HISTORY.

Miss D. T. _____, of L_____, 23 years of age. On August 20th I first examined this young lady. She was apparently well nourished, had a very rosy color, and did not present the appearance of one very ill. She gave a very clear previous history.

At the age of thirteen, just ten years ago, she had, while one day in school, been suddenly seized by a severe pain, as she said, in her stomach. She was then taken home and in some twenty or twenty-four hours it passed off immediately after a free vomiting spell. For six months there was no recurrence, then without warning there was a repetition of the old attack. For the following seven years she suffered every few months from such an attack coming on regularly in the spring and fall. During the past three years the attacks have been appearing much more frequently, in fact, for the past six months she has never gone more than three weeks at the most without an attack. Coincident with the greater frequency, the severity has also increased, so that at the present time she is compelled to take to bed for at least two days at each seizure. The pain continues unabated, in fact, gradually increases in severity from the commencement of the attack until its culmination in a vomiting spell, when it completely disappears. On the culmination of the attack she can eat anything and everything without the slightest discomfort, and enjoys the best of health until the next attack. This seizure has never appeared to be precipitated by a meal or any indiscretion in diet. Immediately after the attack she loses a few pounds in weight, but invariably regains it rapidly. The pain commences in the epigastrium, piercing like a knife to the back, at a point midway between the shoulder blades. She never vomits, or, in fact, never has even the slightest epigastric discomfort between attacks.

On making a careful examination I found the pulse and temperature normal. The heart and lungs were perfectly free from even the suspicion of disease. Urinalysis revealed nothing abnormal in the genito-urinary system. The body was plump and well nourished. Abdominal palpation revealed great tenderness in the epigastrium and also a tender spot just above McBurney's point. By detracting her attention, fairly deep pressure could be brought to bear on either of these points without producing pain. Furthermore, by drawing her attention to the left side of the abdomen and suggesting tenderness, the pain on the right side at once disappeared. It looked to me on the first impression like a typical case of neurasthenia.

Feeling the necessity of keeping her under observation for a short time, I sent her into the hospital and had a complete gastric analysis made on three different occasions. They were perfectly normal, and no hint could even be obtained from them as to the seat of the lesion. While in the hospital she appeared perfectly well, and at the end of a week returned to her own home town.

On September 2nd she returned in apparent great distress, and I sent her into the hospital at once. I now had the opportunity of exam-

ining her in one of the attacks. The pain was entirely epigastric, sharp, severe and lancinating in character and radiated through to the back. The epigastrium was very tender, though no other tenderness was apparent in the abdomen except in a minor degree just above the usual site of the appendix.

The pain increased in severity until six hours after her admission, when immediately after a very free attack of emesis, it suddenly ceased. The vomitus on examination showed bile, free hydrochloric acid and some particles of indigested food. The instant she vomited she appeared perfectly well. There was no jaundice, there was no indication of clay-colored stools, there was no hemetemesis, there was no melæna.

PHYSICAL EXAMINATION.

HEART—Normal.

LUNGS—Normal.

ABDOMEN—Great tenderness in epigastrium. Tender over McBurney's point.

CLINICAL EXAMINATION.

URINE—

Amount in 24 hours, 40 ozs. Color, pale straw. Odor, none. Sediment, none. Reaction, acid. Sp. Gr., 1014. Albumin, none. Sugar, none.

Microscopical Examination—

Pus, none. Blood, none. Crystals, none.

Tube Casts—

Epithelial, none. Blood, none. Granular, none. Hyaline, none.

BLOOD—

Hemoglobin—Dare (95%). Temperature, 98.4-5. Pulse, 78.

Blood Pressure—Systolic, 120 (Normal 100-120 mm.) Diastolic, 90 (Normal 75-95 mm.)

Red Cells—No. 4,200,000 per cu. mm. (Normal, Men 5,000,000. Women 4,500,000).

White Cells—No. 5,800 per cu. mm. (Normal 7,500).

Differential Count of 490 Leucocytes—

Small Lymphocytes, 20% (Normal 22-25). Large Lymphocytes, 4% (Normal 3-6).

Large Mononuclear Leucocytes, 1% (Normal 1-2). Transitional Forms, 1% (Normal 1-2).

Polymorphonuclear Neutrophils, 76% (Normal 70-72) Eosinophiles, 2% (Normal 2-4).

GASTRIC ANALYSIS—

Gastric Extract. Meal given, toast and tea. Quantity Removed, 3 ozs. Food Remnants, slight. Blood, none. Tissue Bits, none.

Chemical Examination—

Reaction, acid. Total Acidity, 50. Free H.C.L., present. Combined

H.C.L. Total H.C.L. Lactic Acid, absent. Altered

Blood, none. Bile, none.

Microscopical Examination—

Micro-Organisms. B. Oppler Boas, none. Yeasts, none. Sarcines, none.

X-RAY (FLUOROSCOPIC EXAMINATION).

HEART—Normal.

LUNGS—Normal.

STOMACH—Position, Normal. Visible Peristalsis, marked. Filling Defects, none. Incisura, none. Hypersecretion, not visible. Mobility: (a) Stomach, greatly dilated and slightly fixed; (b) Pylorus, fixed; (c) Duodenum, slightly fixed. Tender Point, in epigastrium and over McBurney's point. Residue after six hours, marked. Empty in 14 hours.

SMALL INTESTINE—

Duodenum, empty in 18 hours. Ileum, empty in 28 hours.

LARGE INTESTINE—

Colon, empty in 42 hours.

COLON—Fluoroscopic Examination by Opaque Enema, normal.

Discussion.—My first impression of this illness being of a nervous origin was dispelled immediately I saw her in an attack. Her pain was indeed intense. Her facial expression was of one who was suffering real agony. The epigastrium alone appeared rigid, throughout the remainder

of the abdomen the muscles were soft; there was no rigidity. It would appear that the seat of the pathological lesion, whatever it may be, would be found in the immediate epigastric region.

Now, what lesion would likely be responsible for the symptoms here produced? Is it intestinal, is it pancreatic, is it stomach, is it gall-bladder? Is this an enterospasm due to periodical contraction of some portion of intestine in the upper abdomen? Should this be the case, it is likely to be secondary to a chronic intestinal obstruction, one in which the lumen of the gut is not completely occluded from an anatomic point of view, yet sufficiently contracted to chronically interfere with the passage of feces. Should such a condition become acute, the clinical picture presented would be one such as has been described here.

In chronic intestinal obstruction we have most obstinate constipation which may have existed for a long period. A purgative may frequently have to be given, the patient discovering that a bowel movement is very difficult to obtain without. It is frequently the case that this severe constipation will alternate with diarrhoea. If the stenosis is situated in the large intestine, constipation is an early symptom, if in the small, it is usually quite late in appearing.

This girl has never had any constipation, she has never had any diarrhoea. Her bowel movements have always been quite normal.

One of the earliest symptoms of stenosis in the bowel is vague indefinite colic. These spasms gradually become more severe and definite in location, and almost invariably are accompanied by vomiting, which immediately gives relief. In the present instance this condition is marked.

Visible peristalsis is a frequent symptom in chronic obstruction of the intestine. Should the stenosis be low in the bowel, though not necessarily low in the abdomen, these peristaltic waves are quite visible. When present they are always accompanied by colicky pains. In the case of this young woman they were not discernable.

Abdominal distention to a greater or lesser degree is almost invariably present. It depends entirely upon the location and degree of the constriction. In the present instance the abdomen was soft, and at no time was it ever distended.

We have here the absence of constipation alternating with diarrhoea, of visible peristalsis, of tympanites. There has never been either blood or pus in the stools. There has been no loss of weight, and, furthermore, there is no history of syphilis or tuberculosis, two common diseases likely to produce such a stenosis. We have only the severe, intense pain relieved by vomiting, and although in itself very typical of stenosis, we must in the absence of at least some of the foregoing symptoms, look elsewhere for the seat of the trouble.

Pancreatic disease need only be mentioned to be passed by. Although the character of this pain would simulate exactly that produced by a chronic pancreatitis, yet there is wanting some of the most vital symptoms, such as wasting, jaundice, the typical ague-like seizures, etc. There is evidently no lesion of the pancreas.

Is this lesion in the stomach? Is it gastric or duodenal ulcer? The history of the case is not typical of ulcer. This woman would go for weeks enjoying the best of health, eating anything and everything with absolutely no discomfort. Food did not produce pain. The pain she suffered was apparently in no way related to the partaking of food. During all these years there had never been any hematemesis, there had never been any tarry stools. The pain was not of the character produced by ulcer, it was more intense, sharp and lancinating. Vomiting gave immediate relief, when she could at once eat anything without the recurrence of the pain. The picture is not that of ulcer.

With the exception of the loss of weight we would naturally expect to find with gall-stones producing as much trouble as here experienced, this is a picture we would likely see produced by cholelithiasis. She has the typical gall-stone colic, the intense pain shooting from the epigastrium straight through to the back. Like gall-stone colic, it has no relation to food. Like gall-stone colic, it appears suddenly, without warning, and leaves just as abruptly. Like gall-stone colic, too, it usually passes off with a free attack of emesis. After weighing and sifting the evidence carefully, we are forced to the conclusion that the biliary tract is the seat of the trouble, and gall-stones the cause.

Outcome.—On September 7th laparotomy revealed a normal gall-bladder and biliary tract. A large partly-healed duodenal ulcer one inch beyond the pylorus was present, and its cicatrix had so contracted as to narrow the lumen of the bowel at this point to the size of an ordinary lead pencil. The stomach was greatly dilated. Posterior gastroenterostomy afforded complete relief.

SEVEN.

Case No. 1116.	Date, Feb. 17, 1914.
Mr. F. W. _____	Address, J. _____
Age, 26. Civil State, single.	Nativity, Canadian.

CLINICAL HISTORY.

Mr. F. W. _____, of J. _____, age 26. On February 17th, I saw with his physician, this young man, who was evidently very ill. On first sight his appearance was striking. His face was pale and his expression anxious. His eyes seemed to pierce you through, as though to divine your opinion. There was a nervous twitching of the mouth and eyelids, and his hands twitched restlessly on the white counterpane.

His previous history is short. He had been ill but three months,

before which time his health had been the best. Just three months before my seeing him, while driving in a buggy, his horse having become frightened and unmanageable, had run away, throwing him heavily to the side of the road, where, on falling, he struck his abdomen on a large stone. From that moment he was never free from pain at a point just above the umbilicus. He continued to work for another month, though oftentimes complaining much of severe epigastric pain. One month after the accident a distinct lump was discovered just above the umbilicus, which on pressure was tender. It was apparently smooth and rounded. His temperature when taken at that time was 100.1-5, and pulse 88. There were no chills, and the fever appeared to be transient, for on several consecutive days thereafter it was never found to be normal.

Two weeks after the discovery of the lump, or six weeks after the accident, he was compelled to take to his bed on account of the constant pain when he walked around. His temperature was now running about 100 F. in the morning and 101 degrees at night. The mass steadily increased in size and tenderness, and general abdominal distention began slowly to appear.

At the time of my seeing him careful physical examination revealed a distended tympanitic and tender abdomen. A distinct mass could be clearly felt just above the umbilicus. It was very tender to the touch, but not nodular. Examination of the chest revealed nothing. Urinalysis was normal. Temperature 104 F., pulse 132. Careful enquiry revealed no history of tubercular or malignant trouble on either his father's or mother's side.

PHYSICAL EXAMINATION.

HEART—Normal.

LUNGS—Normal.

ABDOMEN—Great pain at point in midline just above the umbilicus. Mass present at this point. General abdominal distention.

CLINICAL EXAMINATION.

URINE—

Amount in 24 hours, 44 ozs. Color, pale straw. Odor, none. Sediment, none. Reaction, acid. Sp. Gr., 1016. Albumin, none. Sugar, none.

Microscopical Examination—

Pus, none. Blood, none. Crystals, none.

Tube Casts—

Epithelial, none. Blood, none. Granular, none. Hyaline, none.

BLOOD.

Hemoglobin—Dare (90%). Temperature, 104. Pulse, 132.

Blood Pressure—Systolic, 118 (Normal 100-120 mm.) Diastolic, 86 (Normal 75-95m.)

Red Cells—No. 4,600,000 per cu. mm. (Normal, Men 5,000,000, Women 4,500,000).

White Cells—No. 7,600 per cu. mm. (Normal 7,500).

Differential Count of 620 Leucocytes—

Small Lymphocytes, 22% (Normal 22-25). Large Lymphocytes, 2% (Normal 3-6).

Large Mononuclear Leucocytes, 1% (Normal 1-2). Transitional Forms, 2% (Normal 1-2).

Poly morphonuclear Neutrophiles, 74% (Normal 70-72). Eosinophiles, 2% (Normal 2-4).

GASTRIC ANALYSIS—

Gastric Extract. Meal given, toast and tea. Quantity Removed, 4 ozs. Food Remnants, none. Blood, none. Tissue Bits, none.

Chemical Examination—

Reaction, acid. Total Acidity, 62. Free H.C.L., present. Combined H.C.L. Total H.C.L. Lactic Acid, absent. Altered Blood, none. Bile, none.

Microscopical Examination—

Micro-Organisms. B. Opples Boas, none. Yeasts, none. Sarcines, none.

X-RAY (FLUOROSCOPIC EXAMINATION).

HEART—Normal.

LUNGS—Normal.

STOMACH—Position, normal. Visible Peristalsis, present. Filling Defects, none. Incisura, none. Hypersecretion, not visible. Mobility (a) Stomach, normal; (b) Pylorus, free; (c) Duodenum, free. Tender Point, in middle just above umbilicus. Residue after six hours, none. Empty in 6 hours.

SMALL INTESTINE—

Duodenum, empty in 12 hours. Ileum, empty in 20 hours.

LARGE INTESTINE—

Colon, empty in 36 hours.

COLON—Fluoroscopic Examination by Opaque Enema, normal.

Discussion.—The condition now presented is evidently one of great acuteness, but whether an acute disease from its commencement, or an acute exacerbation on an old chronic condition, is the question.

Should it be an acute exacerbation of a chronic trouble we would immediately think of an echinococcus cyst, pancreatic or retroperitoneal, simple proliferative peritonitis, cyst tumor of the mesentery, and although the age of the patient would speak against it, yet we could not help but consider carcinoma, either primary or secondary.

If the condition is one acute from the onset, the diagnosis must lie between abscess and acute tuberculous peritonitis.

While echinococcus cysts constitute the most frequent variety of cystic tumors, yet this may be readily ruled out, as the tumor is evidently of a solid variety. For the same reason we may speedily dispose of cysts, both pancreatic and retroperitoneal. Furthermore, this tumor appears to be adherent to the abdominal wall, while a cyst of the pancreas lies behind the inflated stomach and colon. A retroperitoneal cyst is immovable and lies directly behind the inflated colon.

Seventy-five per cent. of all tumors of the mesentery are cystic. The larger ones usually appear in the region of the umbilicus, and though not adherent to the abdominal wall, are not freely movable. Symptoms of stenosis or even intestinal obstruction are frequently caused by their pushing the intestines aside. Though not adherent anteriorly, they often become adherent to their neighboring viscera. The sense of fluctuation is sometimes very doubtful, and it is extremely difficult to differentiate between them and one of a solid variety. The tumor in this case is evidently quite adherent anteriorly, and has every indication of being solid, therefore the presence of a cyst of the mesentery may be ruled out.

Carcinoma in a young man of twenty-six is uncommon. When present it is either primary or secondary. This could scarcely be primary. If on either of the colic flexures it would have produced

stenosis, which is not apparent. If of the great omentum the tumor would be not only adherent to the abdominal wall, but would be distinctly nodular. This one is comparatively smooth. Furthermore, omental cancer is very rarely primary, but rather secondary, to pyloric involvement. There is no evidence of any primary focus anywhere. The question of cancer may confidently be dismissed.

This condition, evidently acute from the onset, is probably infective—is either an abscess formation or an infective peritonitis, probably tubercular. If of abscess formation, where is the focus of infection? The two most likely conditions would be either a huge empyema of the gall-bladder or a subdiaphragmatic abscess from an acute or subacute perforation of a gastric ulcer. The position of the tumor would not conform to the location of the gall-bladder, and as there has heretofore never been the slightest symptom of any gall-bladder disease, we may feel reasonably assured this organ is free from trouble. Subdiaphragmatic abscess is usually the result of an acute or subacute perforation of a gastric ulcer. This man has never had at any time even the faintest suspicion of stomach trouble. Until the time of his accident he had been perfectly well. At the present time his meals are taken without the slightest discomfort.

I wish to state here, however, that it is not absolutely necessary for a patient to exhibit any typical symptoms of ulcer, or even any symptoms of indigestion, in the presence of even extensive ulceration. I have on two occasions operated on acute perforation of a gastric ulcer, where before the moment of perforation no symptom whatever of stomach trouble had been present. In the case of ulcer of the duodenum I have on one occasion had the same experience. In one large subdiaphragmatic abscess I found the cause to be perforated gastric ulcer, and yet no indigestion, no dyspepsia nor stomach symptoms of any description had ever been present.

There is not present in the case under discussion the characteristic tenderness elicited on pressure of an abscess. He had never had the chills so frequently associated with abscess formation. It appears fairly reasonable to exclude pus.

Tuberculosis peritonitis presents itself in various forms. It may be present as a part of a general miliary tuberculosis, or it may be quite latent, as in the appendix or fallopian tube, and only discovered by accident, at operation for other conditions. In tuberculosis of the peritoneum without encapsulation, the disease is sometimes ushered in tempestuously. There may be initial fever of from 103 to 104 F., great abdominal tenderness, tympanites, rigidity, vomiting, constipation and leukocytosis. In these cases it is often difficult to find a cause for the

peritonitis, but frequently an examination of the lungs will furnish the clue. These are also the cases which often have their origin in a chronic tuberculous condition in the appendix or fallopian tube.

A fourth variety is that in which there is definite encapsulation of the exudate forming a tumor, or the formation of a tumor from the rolling up of the great omentum, or the retraction, the thickening, or adhesions of adjacent intestinal coils. Tumors are occasionally formed by the enlargement of mesenteric glands, especially in children. There is also a fifth variety, in which a great quantity of free fluid is present in the abdomen. This is known as the ascitic form.

Is the case in point one of tuberculous peritonitis? The disease was ushered in apparently as the result of an accident, and from the first a steady augmentation of the symptoms were experienced. We have the slow formation of a tumor, no palpable ascites, but rather a somewhat tympanitic abdomen. We have a high temperature with fast pulse. There is no pulmonary tuberculosis, and no tubercular history. There is apparently no primary focus of cancer, and there is no cancer history. With the exclusion of all other possible conditions we are thus forced, even in the absence of so-called typical symptoms, to consider this a case of tuberculous peritonitis, with the formation of a tumor from either rolled-up omentum, or encapsulated exudate.

Outcome.—On February 20th I opened the abdomen. The great omentum was rolled up into a large hard mass. The peritonitis was studded with tubercle throughout its entire extent. There was present but a small quantity of ascitic fluid.

DR. BELAND IN ANTWERP.

Hon. Dr. H. S. Beland, Postmaster-General in the Laurier Cabinet, was in attendance upon the wounded in Liege, and on the fall of that place he made his way to Antwerp. In the latter place he ministered to the British Marines, and it was understood that he would join the Canadian force when it reached the front.

In a letter to colleagues in Canada, Dr. Beland says: "I have thrown in my lot unreservedly with the British and Belgian forces here, deeming it a duty and privilege, as a Canadian, to do whatever my small part may be in this war of righteousness, and am prepared to accept the outcome, whatever it may be."

"Uncivilized and terrible" are the words he uses to describe German cruelties.

CURRENT MEDICAL LITERATURE

THERAPEUTICS

TREATMENT OF URTICARIA.

W. T. Coughlin, in the *Interstate Medical Journal* for September, 1913, states that to relieve the itching in urticaria, both lotions and powders may be used, either singly or together. The best lotion is either a solution of phenol in hot water to which glycerin has been added:

℞ Phenolis gr. xxiii (1.5 gram)
 Glycerini ℥i (30 grams)
 Aquæ ferventis ℥iv (120 grams)

M. et ft. lotio.

or one of hot water containing thirty-three per cent. of vinegar. These are to be mopped on, and while they are drying the surface is powdered either with fresh starch, bismuth subnitrate, or zinc oxide containing two per cent. of menthol or camphor. Internally valerian may be given. Bromides and chloral hydrate may make matters worse, their use often giving rise to urticaria. Digestive disturbances are often the cause of the condition; if this is the case in the patient under observation, a dose of castor oil followed by a bland diet will prove beneficial.—*N. Y. Med. Jour.*

TREATMENT OF CORYZA IN SYPHILITIC INFANTS.

Rudaux, in *Quinzaine thérapeutique* for October 25, 1913, is credited with advising that the following diluted hydrogen dioxide solution be instilled in the nostrils of infants suffering from this condition:

℞ Aquæ hydrogenii dioxidi ℥ii (8 grams)
 Aqua sterilisatæ ℥i (30 grams)

M. Sig.: Four or five drops to be instilled into the nostrils three times daily.

Two hours after each dioxide instillation the following oily preparation should be similarly used:

℞ Resorcinolis ℥iv (0.25 gram)
 Petrolait liquidi sterilisati ℥i (30 grams)

M. Sig.; A few drops to be instilled in the nostrils after the hydrogen dioxide.

Where the nasal disturbance interferes with feeding, three or four drops of a one in 10,000 solution of epinephrine hydrochloride should be distilled into each side of the nose before the child is nursed.—*N. Y. Medical Journal.*

TREATMENT OF ACNE PUNCTATA.

In *Quinzaine thérapeutique* for December 10, 1913, is recommended the following lotion for use in this condition:

- ℞ Resorcinolis gr. lxxv (5 grams)
 Sulphuris loti gr. lxxv (5 grams)
 Aquæ coloniensis ℥v (150 grams)
 M. et ft. lotio.

The affected area may with advantage be rubbed with soap and water. Washing with a solution of borax is also useful:

- ℞ Sodii boratis ℥i-iss (30-50 grams)
 Cum aqua fervente Oii (1 litre)
 Solve

Overnight, a little of the following ointment should be kept over the affected area:

- ℞ Betanaphtholis gr. iiss (0.15 gram)
 Camphoræ gr. iiss (0.15 gram)
 Resorcinolis gr. iii (0.2 gram)
 Saponis gr. iii (0.2 gram)
 Cretæ præparatæ gr. viii (0.5 gram)
 Sulphuris præcipitati gr. xxiii (1.5 gram)
 Petrolati puri ℥v (20 grams)
 M. et fiat unguentum.

Simultaneous internal use of powdered charcoal may be of value.

TREATMENT OF CARDIAC AND NEPHRITIC ASCITES.

Goddhart and Still recommend the following as useful diuretics in children:

- ℞ Tincture of digitalis ℥j
 Solution of acetate of ammonia ℥jss
 Spirit of nitrous ether ℥ij
 Syrup of tolu ℥ss
 Caraway water ad ℥iij

M. et Sig.; One teaspoonful every two or three hours.

- ℞ Tincture of digitalis ℥j
 Theocin sodium acetate gr. xx
 Spirit of chloroform ℥xxx
 Glycerine ℥iij
 Peppermint water ad ℥jv

M. et Sig.: Two drams every six hours may be given to a child eight years old.—“*Disease of Children.*”—*Medical Record.*

BELLADONNA IN GASTRIC ULCER.

E. Müller recommends the following powder in the treatment of the pains of gastric ulcer:

R Extract of belladonna	0.02 gram
Bismuth subnitrate	0.2 gram
Calcined magnesia	0.4 gram

This should be given three times a day.—*Die Therapie des praktischen Arztes.—Medical Record.*

 PERSONAL AND NEWS ITEMS

 Ontario.

Dr. J. O. Reaume, for a number of years the Minister of Public Works in the Cabinet of the late Sir James Whitney, has retired from public life. He was defeated in his riding of Windsor at the last general election. He has been appointed Registrar for Essex.

The weekly clinic at the Toronto General Hospital for the Feeble-minded is proving very successful and is well attended. Dr. C. K. Clarke, the dean of the medical faculty, superintendent of the General Hospital, and for many years at the head of the Toronto Asylum, is conducting the clinic.

Dr. Howard H. Burnham, of Toronto, son of Dr. G. H. Burnham, has gone to the front, as medical officer, with the second brigade, Canadian Field Artillery.

Dr. Gordon Rice, formerly associated with the late Dr. S. Bruce Riordan, has been appointed to the position of division surgeon for the Ontario lines of the Grand Trunk Railway, the post vacated by the death of Dr. Riordan. Dr. Rice will also hold the position of medical officer for Toronto of the Grand Trunk Insurance and Provident Society.

The new Hamilton Hospital will cost about \$200,000, and will furnish accommodation of 500 beds. The by-law for a city grant of \$125,000 was defeated.

The Essex County Hospital for Tuberculosis has been enlarged by an addition that will accommodate ten patients.

Dr. Carlton Jones has gone with the Canadian contingent in charge of the hospital and ambulance services.

Dr. R. A. Reeve has resigned his chair of ophthalmology in the

University of Toronto, and has been succeeded by Dr. J. M. McCallum; and Dr. G. K. McDonagh has resigned that of oto-laryngology and has been succeeded by Dr. Wishart.

The entire estate, valued at \$31,872, of the late Dr. J. J. Cassidy, of 6 Spadina Road, Toronto, who died on August 1st, this year, will go to his widow, Appolonia A. Cassidy.

Sir James Grant, of Ottawa, has been elected representative of the University of Ottawa on the Medical Council of Physicians and Surgeons of Ontario. He is the only surviving member of the original Council of 1866.

Upon investigating a report that two Indians on the Tuscarora reservation had a peculiar skin disease, and were badly broken out, Dr. Thomas A. Kerr, of Lewiston, found that the two men were suffering from smallpox, and that a large portion of the population on the reserve had been exposed to the disease.

The fund for the Canadian Red Cross work is rapidly climbing up. Some time ago it had crossed the \$100,000 mark, and was receiving daily additions.

Dr. J. B. McMurrich has taken charge of a private hospital for the treatment of alcoholic and drug cases. The hospital is located at 622 Spadina Ave., Toronto.

Dr. John Wood, London, was overcome by some gas while taking a bath and was nearly drowned. He was resuscitated after a prolonged effort.

Dr. R. H. Fortune, of Harriston, while on his way to the station, his car skidded and overturned, seriously injuring the doctor and slightly injuring his daughter.

Roman Catholics of St. Thomas have purchased the residence and grounds of John Farley, overlooking Kettle Creek valley, in the west end of the city, and announce that they will at once commence the erection of an up-to-date hospital, at a cost of between \$60,000 and \$100,000. The site is an ideal one for hospital purposes.

Dr. Charles A. Hodgetts, of Ottawa, formerly of Toronto, has been appointed as commissioner for the Canadian Red Cross Society to Britain. Dr. Hodgetts succeeds the late Colonel Burland, of Montreal, who died suddenly recently in London.

Quebec.

Dr. J. G. Adami, of Montreal, has enlisted as a private in the battalion which is being raised at McGill University for service in the European war. Dr. Adami is professor of pathology at the university.

The Congress of Physicians of the French Language, which was to have been held at Quebec in September, has been indefinitely postponed on account of the war.

Dr. E. S. Aubrey, of Hull, has been elected one of the Governors of the College of Physicians and Surgeons of Quebec.

Dr. E. R. Brown has volunteered for active service in the Fifth Royal Highlanders of Canada.

Sir Thomas G. Roddick had an exciting time in making his escape from Europe. He was then laid up for some time with pneumonia.

Dr. Campbell Keenan, of Montreal, has gone with the Princess Patricia Light Infantry as regimental surgeon. He was with the Strathcona Horse in South Africa.

Dr. C. J. Edgar, of North Hatley, Quebec, has received a commission as surgeon in a military hospital at Netley.

Maritime Provinces.

Dr. Murray Maclaren, of St. John, N.B., has gone with the Canadian contingent.

Dr. H. C. Witmore has been appointed deputy receiver-general for the port of St. John.

Western Provinces.

In Calgary twenty persons were infected with scarlet fever through a milk supply from one dairy.

A small hospital was opened at Grassy Lake, Alta. Contributions amounting to \$1,000 were made to it.

There is a marked lack of hospital accommodation in the Province of Saskatchewan. It has been suggested that municipalities should join together and erect union hospitals.

The Provincial Bureau of Health for Saskatchewan has issued a circular to teachers requesting that they give some instructions in hygiene in the schools. Bulletins containing information are supplied.

An addition has been planned to the asylum at Battleford. There will be three additional units.

A surgical ward has been put in use as an addition to the Vancouver General Hospital. It contains 25 beds.

The Point Grey City Council, Vancouver, has adopted a by-law enabling the Health Officer to isolate cases of consumption.

Dr. Harry Morell, of Regina, has gone with the Canadian contingent.

Dr. Victor Bonju, who has been in practice for fifteen years at Sintaluta, has sold his property there and will live at Indian Head.

The Moose Jaw Medical Society has elected the following officers: President, Dr. G. P. Bawden; vice-president, Dr. C. H. Freeman; secretary-treasurer, Dr. C. G. Sutherland.

From Abroad.

A movement has been successfully started by Sir W. Osler for the restoration of the tomb of Avicenna, at Hamadan. Prof. Osler has styled Avicenna the "Prince of Physicians." The consent of the Persian Government has been secured, and a sum of £600 will be required for the restoration and up-keep of the tomb.

The estate of the late Dr. Morris Loeb, of New York, was appraised at over \$2,000,000. Upon the death of Mrs. Loeb, a fund of \$500,000 will revert to Harvard College, and a trust fund of \$250,000 to the Solomon and Betty Loeb Memorial Home for Convalescents.

Bowdoin College has received a gift of \$15,000 from the estate of the late Dr. Frank Hartley, the New York surgeon, to establish a scholarship fund as a memorial to his father, John Fairfield Hartley, of the class of 1829, who was for many years assistant treasurer of the United States.

An appeal for aid in the equipment of the American hospital in Paris has been made. The American Hospital has undertaken to provide at least one thousand beds to care for wounded soldiers, and the French Government has placed the new building of the Lycée Pasteur at the disposal of the hospital for that purpose. This annex, known as the Ambulance Hospital, will be equipped and supported by Americans, and the staff of the hospital will be composed of American physicians and nurses. American men and women in Paris have volunteered to assist them and are already serving. They are in immediate need of funds and wish to raise \$250,000 to carry on the work of the hospital.

The will of the late Liberty E. Holden contains a legacy of nearly \$1,000,000 to the Medical School of Western Reserve University, to be known as the Albert Fairchild Holden Foundation.

Dr. L. Bolton Bangs, whose death occurred recently, after a brief illness, was one of the oldest and best known of what may be called the second generation of urological surgeons of this country. He was born in this city on August 9th, 1842, and was graduated from the College of Physicians and Surgeons (Columbia University) in 1872. In 1880 he was appointed attending surgeon to Charity (now City) Hospital, and in 1885 he became one of the attending surgeons to St. Luke's

Hospital. In 1898 he was made professor of genitourinary diseases at the University and Bellevue Hospital Medical School, and held the chair in the same subject at the New York Post-Graduate Medical School and Hospital. At the time of his death he was consulting surgeon to St. Luke's, Bellevue, City, St. Vincent's, Post-Graduate, and M. E. Hospitals. He was a member of the New York Academy of Medicine, of the Medical Societies of the County and State of New York, of the American Medical Association, and of the American Association of Genito-Urinary Surgeons, having been president of the latter in 1895. He was editor of the American Text-Book of Genito-Urinary Diseases, and had contributed largely to the literature of his specialty.

Dr. Joseph A. Blake, formerly of New York, who is now in charge of the American hospital corps attending wounded soldiers in Paris hospitals, has asked for volunteers among American surgeons to go to Paris and aid in the work. Seven young surgeons, in answer to this call, sailed from New York on Saturday, September 26th, on the *Olympie*. Six of the volunteers, who will work in the American Hospital in Paris during the continuance of the war, are Dr. J. P. Hoguet, Dr. Corry, Dr. Benjamin Jablons, and Dr. Lester Rogers, of New York; Dr. A. H. Dugdale, of Omaha, and Dr. Mercer Blanchard, of Columbus, Go. The seventh volunteer, who will remain only six weeks, is Dr. Richard Derby. Subscriptions to this fund received by the New York Branch of the American Red Cross Society amounted to \$158,162.70 on Tuesday, September 22nd.

W. H. Gaskell, M.D., LL.D., F.R.S., died on 7th September, in his 67th year. He was the last survivor of the brilliant group of men who worked with the late Sir Michael Foster at Cambridge.

Few men have left more evidences of their work in a quiet way than Sir Henry Greenway Howse, whose death occurred recently at the age of 73. A mere record of what he did to improve surgical methods, to advance surgical practice, to promote the efficiency of the medical school at Guy's, to serve the College of Surgeons, the University of London, and the higher education of women, would alone make a list of formidable length. That his work and his worth were not more widely known was due to his natural dislike of publicity. He was content to apply the results of his investigations for the benefit of those he had undertaken to teach and to help.

It is announced that the Paris Academy of Sciences has awarded to Dr. H. Vincent a prize of 3000 francs for his work on typhoid fever.

A despatch from Bordeaux to the Reuter's Telegram Company states that a decree has been issued authorizing the Minister for War to accept the sum of half a million francs (\$100,000) offered by the

Canadian Government for the organization and maintenance of Red Cross hospitals.

Matin states that a group of German nuns and several hundred nurses have been arrested on one of the first battlefields of France on the charge of injecting chloroform into French soldiers to finish them off. All were brought to Paris and most of them are in the Sante Prison. A German physician with the rank of general, under whose orders the nuns and nurses were acting, is also in the Cherche Midi military prison with his aides.

Two nurses, Mlles. Cunay and Bertrand, have been mentioned in despatches for valor under fire.

Thirty British doctors and 120 nurses belonging to the British Red Cross Society, who were turned out of Brussels, Belgium, after sixty of the party had been imprisoned for thirty-six hours in a railway train, arrived safely in Copenhagen.

Dr. John C. Wise, of Washington, D.C., who was Dewey's surgeon-general, just returned from several weeks in French war hospitals, declares Southern France is one great hospital and Northern France is a battlefield. There he saw instances of old men and women knocked on the heads by gun butts, and children killed outright.

The Queen's Canadian Military Hospital at Shorncliffe has been completed. The beds, operating theatre and apparatus are all complete, and the official visit of the War Office representative, who must approve the arrangements, has been made. The matron in charge, Miss McMahon, of Toronto, is already there, and she has been joined by the other nurses.

The Red Cross Hospital of 200 beds established by the American Women's War Relief Fund, near Torquay, is the best equipped, best arranged war hospital in England, according to Sir Frederick Treves, the distinguished surgeon. This organization, which has for officers the Duchess of Marlborough, Lady Paget, Lady Randolph Churchill, Mrs. John Astor and other well-known Anglo-Americans, has appropriated \$25,000 for motor ambulances to convey the wounded from ships to hospitals. The War Office has stated that the hospital equipment in England was weakest in respect to such ambulances. The women have raised money enough to maintain the hospital a year, carry on a certain amount of outside relief work and leave a balance of \$175,000.

Sir Charles Tupper has two grandsons and the husband of a granddaughter in the first contingent.

Dr. James G. Mumford, medical superintendent of the Clifton Springs Sanitarium, died on 18th October, after a brief illness. He had recently returned from a vacation in New England. Dr. Mumford

was one of the foremost surgeons in America and last year was president of the American Society of Clinical Surgeons.

The Government received a cable from the Hon. George H. Perley, stating that the French Government has decided to establish in the casina at Dinard, on the west coast of France, the Hospice Canadien, which is to be provided and maintained by Canada.

The French ship Marie Henriette, with wounded soldiers on board went ashore near Cape Barfleur, 16 miles east of Cherbourg.

A hundred Canadian nurses, who accompanied the Canadian contingent under Sister Margaret MacDonald are now in London awaiting orders from the War Office. They express warmest appreciation of the hospitality of St. Thomas' Hospital, opposite the Houses of Parliament, where they are most comfortably quartered. They are dividing their time between sightseeing and assisting nurses for a large number of wounded at the hospital.

JAMES WEIR RENWICK.

Dr. Renwick, of Courtland, Ont., died there at the age of 67. He was a graduate of Trinity University of 1875.

ADAM W. L. WEBB.

Dr. Webb died at Brighton early in September from the effects of eating poisonous mushrooms. He was a graduate of the University of Toronto in 1903. He practised for a short time at Wooler before he located in Brighton.

T. HERBERT JACKSON.

Dr. Jackson, of Montreal, died there in the Western Hospital. He had been in charge of the medical work on the eastern division of the Transcontinental Railway.

G. H. GRAVES.

Dr. Graves, of Carp, Ont., died there last August. He was born in 1850, and graduated from McGill in 1879. He had practised continuously in Carp.

FREDERICK THOROLD.

Dr. Thorold died at Kamloops, B.C., early in September, in his 84th year. He was an English graduate and came to Canada in 1851. He qualified in this country by a course in the Toronto School of Medicine.

A. W. BELL.

Albert William Bell, physician, was born at Markham, Ont., August 18th, 1862, and studied at Jarvis Street Collegiate, Trinity University and the University of Toronto. He graduated in medicine from Trinity in 1891, and was for some years assistant manager of Toronto Industrial Exhibition, and superintendent of live stock; was appointed general manager of the Winnipeg Exhibition in March, 1906. He was also secretary-treasurer of the Sheep and Swine Breeders' Association, Cattle Breeders' Association, and Horse Breeders' Association of Manitoba. He died in Winnipeg 7th October.

JOHN I. WILEY.

Dr. John I. Wiley, ex-Mayor of Dresden, died on 15th October, from an attack of pernicious anæmia. He was 48 years old, and in 1889 graduated as gold medalist from Trinity College, Toronto. Madge, of the faculty of education, Toronto, is a daughter. Deceased was one of the most prominent Masons in the district and was president of the East Kent Liberals.

JOHN C. RAY.

Dr. Ray, for many years a resident medical practitioner of Toronto, died at home on 17th October. At one time he followed his profession in Oshawa, to which place his remains were removed for interment.

SOLOMON SINGER.

Dr. S. Singer, of Toronto, died two weeks ago, after a brief illness, due to typhoid fever. He was a graduate in arts and medicine of the University of Toronto, taking his degree in medicine in 1903. After graduating in Toronto, he did some post-graduate study in New York. For some time he was a member of the staff of the Toronto General Hospital, having a considerable share in the treatment of patients in the

outdoor department. He was a Mason, a member of the Bond Street Synagogue, and a coroner. He leaves a widow and two children. He was in his thirty-eighth year.

H. M. SHEPHARD.

Dr. Shephard died in Ingersoll on 20th October, after an illness that lasted only twenty-four hours. For some time before his death he had not enjoyed his usual health. He formerly practised in London, from where he moved to Ingersoll, purchasing the practice of Dr. J. A. Neff. He was married four months ago in Sherbrooke. He was 27 years of age, and is survived by his widow.

H. R. McCULLOUGH.

Henry Reid McCullough, M.D., one of Harriston's most prominent and respected citizens, passed away at his home on 21st October, after a short illness. The late Dr. McCullough was born in 1863, and was a son of the late Robert McCullough, M.D., of Georgetown. He was educated at Brampton high school and Trinity Medical College, Toronto, graduating in 1887. After taking post-graduate courses at London and Edinburgh, he settled in Harriston in 1888, where he was in continuous practice till within two weeks of his death. The sympathy of the entire community goes to the bereaved wife, formerly Miss Agnes Johnston, of Toronto, and their four daughters. The doctor is survived also by four brothers and one sister—Patrick McCullough, barrister, Markdale, Ont.; John S. McCullough, M.D., Walter's Falls, Ont.; R. C. McCullough, Georgetown; H. A. McCullough, M.B., 34 Carlton St., Toronto, and Miss Sarah McCullough, Georgetown. The deceased took a prominent part in the business and social life of the town. He had served on the Board of Education and the Municipal Council, and was coroner for the county of Wellington.

BOOK REVIEWS

WRIGHT AND SMITH'S TEXT-BOOK OF THE DISEASES OF THE NOSE AND THROAT.

By Jonathan Wright, M.D., Director of the Department of the Laboratories, New York Post-Graduate Medical School and Hospital, and Harmon Smith, M.D., Surgeon to Throat Department of the Manhattan Eye, Ear, Nose and Throat

Hospital; Clinical Professor of Laryngology and Rhinology, Cornell University Medical School. Octavo, 683 pages, with 313 engravings and 14 plates. Philadelphia and New York: Lea & Febiger, Publishers, 1914. Cloth, \$5.00 net.

This new text-book of laryngology is a notable addition to the literature of the subject. While essentially, by reason of its clarity of statement, logical plain and unusual literary style, all that a text-book should be, it is, moreover, a most comprehensive general treatise on its subject. Both text and illustration give abundant evidence of painstaking effort in the accumulation of material and its preparation for presentation.

The feature that at once distinguishes this book is the emphasis laid upon the etiology and pathology of disease. Recognizing this is essential to logical and scientific procedure, the authors advance in their discussion of nasal, laryngeal and pharyngeal morbid processes from an etiological and pathological basis. While it has been their aim to give causes and consequences the consideration due their importance, this has not been accomplished at the expense of other aspects. The consideration of symptomatology and diagnosis and the topical and operative treatment of disease of the upper air passages follow in natural and logical sequence and in no less comprehensive detail.

Much of the work in etiology and pathology rests on original investigation in the laboratory and clinic extending over many years. While the authors' familiarity with the extensive literature of this subject is evident, reference and historical allusion are studiously subordinated to the presentation of original research and conclusion.

An easy literary style carries the attention of the reader, while the illustration is so complete, detailed and extensive as to be remarkably illuminative.

While planning a text-book, the authors have succeeded also in recognizing and emphasizing exactly what is required by their fellow practitioners. In its nearly 700 pages is comprised practically the sum total of present-day knowledge in laryngology, so logically arranged, with such a wealth of illustration, with all procedures so clearly set forth, that it should be of the utmost value to every general practitioner who treats the nose and throat, as well as to the specialist in this field.

While this is true, it must not be inferred that the treatment of these diseases does not receive the fullest consideration. Indeed, the very reverse is true, and the therapeutic side of the book, both medical and surgical, is specially full and complete, and of such a character as to demand respect and justify those who study this book in following the methods laid down therein. We feel that there is a useful future in store for this work.

AN EPITOME OF PEDIATRICS.

By Henry Enos Tuley, A.B., M.D., Late Professor of Obstetrics, Medical Department, University of Louisville; Editor Louisville Monthly Journal of Medicine and Surgery; Late Chairman of Section Diseases of Children, American Medical Association; ex-President American Association Medical Milk Commissions, etc. New (2d) edition, revised and enlarged. 12mo., 324 pages. Philadelphia and New York: Lea & Febiger, Publishers, 1914. (Lea's Series of Medical Epitomes). Cloth, \$1.00 net.

In no field have advances been more rapid or the widening of knowledge more marked than in pediatrics. This wealth of new material has impelled the author to practically rewrite his earlier work in preparing the new edition.

The character and scope of the book have not been altered. It contains the essentials of the subject as taught by the foremost authors, instructors and specialists, collated and epitomized by the author with marked success. He overlooks no necessary detail in the whole wide subject from birth to adolescence, with ample consideration of the anatomy, development, care and examination of infants, the therapeutics peculiar to that age, the feeding of infants and other children, and the symptomatology, diagnosis and treatment of the various diseases.

Important additions have been made to the chapter on contagious diseases; a valuable chapter on diseases of the skin added; and important additions and modifications made in the section devoted to infant feeding, certified milk, milk modification, pasteurization, etc.

The book is characterized by completeness as much as by the author's success in condensing the essentials of so broad a subject within the limits of a volume of this size. The set of questions terminating each chapter has been substantially amplified. The student's demand for condensed literature on pediatrics has been successfully met, and his mastery of this small volume will qualify him for examination or for putting his knowledge into practice.

 ADAMI AND McCRAE'S TEXT-BOOK OF PATHOLOGY.

For Students of Medicine. By J. George Adami, M.A., M.D., LL.D., F.R.S., Professor of Pathology in McGill University, Montreal, and John McCrae, M.D., M.R.C.P., (London), Lecturer in Pathology and Clinical Medicine in McGill University, formerly Professor of Pathology in the University of Vermont. Second edition, enlarged and thoroughly revised. Octavo, 878 pages, with 395 engravings and 13 colored plates. Philadelphia and New York: Lea & Febiger, Publishers, 1914. Cloth, \$5.00 net.

The great popularity into which this work sprang immediately on publication, is shown in the appearance of a new edition only two years after the original issue. Such success can come from only one cause, and there can be no doubt as to the surpassing merits of this work.

Pathology is probably the most difficult subject to present of any in medicine, and heretofore it has baffled almost every effort. The authors of this work, however, are admirably equipped. They are pathologists of unexcelled scholarship and literary ability, and they possess a commanding knowledge not only of pathology itself, but also of all the sciences contributory thereto. They have carried on original investigation, study and research, so that they speak with the authority of first-hand knowledge. It is their aim to teach the student to think for himself and accordingly in this work continued emphasis is placed upon the reasons underlying pathological conditions. In the new edition all the reliable advances of the past two years have been included. A new chapter on "The More Important Infections and Their Prominent Features" has been inserted. The classification of tumors has been simplified, the recent work dealing with toxins and the effects of "split products" is included; a syllabus has been placed at the beginning of each chapter; and the volume is completely cross indexed. A fair idea of the thoroughness of the revision may be obtained from the fact that the new edition contains over one hundred additional pages, as well as 91 new engravings, and two new colored plates.

Those who are familiar with Professor Adami's work in the department of pathology will require no recommendation of this book. In this volume the many problems of pathology are discussed in a clear and scientific manner, and the latest views are carefully stated.

HARE'S PRACTICAL THERAPEUTICS.

With Especial Reference to the Application of Remedial Measures to Disease and Their Employment upon a Rational Basis. By Hobart Amory Hare, M.D., B.Sc., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College of Philadelphia. New (15th) edition, thoroughly revised and rewritten. Octavo, 998 pages, with 144 engravings and 7 plates. Philadelphia and New York: Lea & Febiger, Publishers, 1914. Cloth, \$4.00 net.

Hare's Therapeutics has become one of the classics of medical literature. Excepting only Gray's Anatomy, it has probably been more widely used, both by students and physicians, than any other work in any department of medicine. It has always held the distinguished position of being by far the best exponent of therapeutics in the English language, and in its many editions it has reflected faithfully the wonderful advances of the past twenty-five years. The present new edition (the fifteenth) is, if possible, an improvement over its excellent predecessors. The same plan is followed throughout; the useful characteristics have been maintained; the text has everywhere been brought up to date, and certain articles have been added or rewritten, as, for

example, those on salvarsan and neosalvarsan, tuberculin, anesthetics, digitalis and the other cardiac drugs. The text which deals with many of the newer methods, such as viceine therapy, will be found judicial and unbiased. The following quotation from the preface is characteristic of the spirit which pervades the entire work: "This is the era of therapeutic rationalism, when remedies are given not because they are recommended by, or said to be valuable by, some authority, but because their use appeals to the medical man who has a knowledge of the physiological, pathological and therapeutic problems to be faced, and can, therefore, judge for himself what remedy is best suited to a given case when he is informed how it acts."

The fact that this work now appears in its fifteenth edition is abundant proof of its popularity. But it could not have attained nor maintained this popularity were it not for the real merits of the book. No better guide on practical therapeutics can be found than this work.

THE CANCER PROBLEM.

By Wm. Seaman Bainbridge, M.D., Surgeon to the New York Skin and Cancer Hospital; Professor of Surgery, New York Polyclinic Medical School.

Each successive generation has added its quota of theory to the subject of cancer, with now and then a fact to illuminate the situation, while the inauguration of what has been called the era of modern or scientific cancer research has produced books, brochures, papers, and other contributions in disconcerting volume. It has been correspondingly difficult for those not actually taking part in the campaign of research, and even for those who are the real history-makers in this line, to keep abreast of the times and to satisfactorily digest the mass of cancer literature.

In the preface to "The Cancer Problem," (The Macmillan Company, New York and London), the author, Dr. William Seaman Bainbridge, of New York, says: "With the development of the widespread interest in cancer there has arisen a definite need for a book of ready reference, of convenient size, giving in succinct and available form a summary of knowledge concerning the subject. This is needed by the general practitioner, by the specialist, by the intelligent layman, by the lecturer on health matters; in fact, by all who are definitely interested in questions of health maintenance."

Dr. Bainbridge has succeeded in his undertaking remarkably well. Finding it necessary, as he states, "to touch upon practically every phase of the cancer problem, to state theories, to emphasize facts, to review the work and opinions of those who are qualified to speak with

authority, and to maintain throughout an attitude of 'suspended judgment pending proof,' " he has shown skilful discrimination in winnowing the wheat from the chaff, the fact from the fiction.

The fourteen sections, some of which are subdivided into chapters, the final survey, called "The Outlook," the General Bibliography, the Index of Authors, and the very full Index of Subjects, all contain a surprising amount of valuable information concerning this multiplex question.

Practically every class of reader can find within the pages of this book subject matter to suit his particular needs.

The statistician will find the section on "Statistical Considerations" a book within itself, full of valuable information and a careful correlation of facts and figures, instead of the usual compilation which one is accustomed to encounter under the heading. Careful study of this section will dispel much of the alarm created by those who for so long have harped upon the one string of the increase of cancer. It is to be hoped that American statisticians will be stimulated to remove the stigma which some of our foreign confreres have placed upon our methods of collecting data, so that, in future editions of "The Cancer Problem," the author will not be forced to accept the imputations made abroad.

The laboratory worker will find the section under "Histo-Pathology" a condensation of knowledge concerning the minute anatomy and pathology of cancer that must prove of great practical value, particularly as it is supplemented with a large number of histological plates and other illustrations. This section, together with that part of section 1 which deals with the "History of Modern Cancer Research," and the section entitled "Cancer Research: A Resume of the World's Work," will give much valuable data to those who are especially interested in the laboratory and purely experimental phases of the subject.

Just at this time, when not only medical societies, but women's clubs, mothers' congresses, and very nearly every other variety of organization, are dabbling in cancer study, the section on the "Campaign of Education" will be found peculiarly pertinent. It is interesting to note that Dr. Bainbridge takes a very conservative stand on this particular question of educating the public with reference to cancer. In addition, the sections on "Prophylaxis," "Institutions for the Care of Cancer Patients," and "The Investigation of Cancer Cures," will give to propagandists much conservative, rational, and logical matter which, if properly digested, will augur well for the victim of cancer and for those who, by virtue of age, sex, industrial, or other predispositions, are fair subjects for the inroads of this disease.

The clinician, however, is always interested in the vital question, "What can I do for my patients?" Abundant answer to this question is found in the sections on "Clinical Course and Diagnosis," (including a valuable subdivision on "Possible Errors in Diagnosis"), "Non-Surgical Treatment," "Surgical Treatment" (comprising the subdivisions, "General Technic of Surgery as Applied to Cancer" and "Special Technic"), and a practical consideration of "Irremovable Cancer."

After reading Dr. Bainbridge's clear-cut exposition of the entire subject, the reader will be in accord, we think, with the closing paragraph of the book: "While it cannot be gainsaid that the cancer problem to-day is still fraught with perplexity and uncertainty, one indisputable fact stands out in bold relief, serving as both guide-post and danger-signals for the present and the future: If cancer be cut out soon enough a permanent cure is effected! This alone is sufficient to warrant the statement that we are 'travelling hopefully.'"

TREATMENT OF DISEASES OF THE HEART.

The Balmo-Gymnastic Treatment of Chronic Diseases of the Heart. By Prof. Theodor Schott, M.D., Bad-Nauheim, Germany, with foreword by James M. Anders, M.D., LL.D., Professor of Medicine, Medico-Chirurgical College, Philadelphia. With 87 illustrations, including 41 gymnastic poses. Philadelphia: P. Blakiston's Son and Company, 1012 Walnut Street. Price, \$2.50.

The medical profession is now familiar with the views of Dr. Schott. His method of treatment seems to fill a useful place in those cardiac cases arising from over-strain and nervous wear and tear. It is not yet proven to what extent this treatment may influence favorably organic diseases of the cardio-vascular system. The book is worthy of a careful study.

PROGRESSIVE MEDICINE.

A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D., and L. F. Appleman, M.D. Vol. iii., September, 1914. Philadelphia and New York: Lea & Febiger. Price in paper covers, \$6.00 per annum.

In this volume we have discussed the diseases of the thorax, by William Ewart, M.D.; Dermatology and Syphilis, by W. S. Gottheil, M.D.; Obstetrics, by E. P. Davis, M.D., and Diseases of the Nervous System, by W. G. Spiller, M.D. Each section is carefully written and furnishes a complete review of the recent advances in these departments. We note with pleasure the continued high excellence of this series.

REPORT ON PATHOLOGY AND CLINICAL PSYCHIATRY.

Report from the Department of Pathology and the Department of Clinical Psychiatry, Central Indiana Hospital for the Insane, 1911-12 and 1912-13. Vol. v. Indianapolis: W. B. Burford, contractor for the State printing and binding, 1914.

This is a very valuable report. It gives a clear statement of the pathological findings and the clinical progress of many interesting cases in the Hospital for the Insane at Indianapolis. The clinical portion of this volume will be read with interest by those who are fortunate enough to possess a copy. The report is a very useful one, and is of the kind that is calculated to disseminate useful knowledge.

MISCELLANEOUS

UNIVERSITY OF TORONTO MEDICAL EXAMINATIONS.

The results in the University of Toronto Faculty of Medicine are announced as follows:

Fifth Examination—Pass—Miss E. M. Cowling, F. G. Davis, R. E. Horkins, xB. D. Lowrey (clinical medicine), Miss L. I. F. Moodie, xA. J. McIntosh (clinical medicine), R. P. Smith, Miss A. B. Speers, H. C. Sutton, M. G. Thomson, xR. R. Wilson (clinical medicine).

Fourth Examination—Pass—S. R. Armour, N. E. Betzner, J. R. Boyd, W. A. Cameron, H. H. Colwell, F. R. Gillrie, M. E. Gorman, J. B. Hanley, M. R. Helliwell, J. R. Howitt, F. R. Kirkham, G. A. Lamont, D. E. Lang, F. L. Letts, H. C. Martin, W. M. Martyn, H. K. Mitchell, A. B. Moffat, A. McCallum, G. W. MacNeil, P. M. O'Sullivan, R. Paul, E. Z. Stirrett, G. M. Watt.

L. R. Gamey is granted aegrotat standing of the Fourth Year.

Third Examination—Pass—R. H. Armstrong, T. W. Ballantyne, W. A. Blake, I. Cohen, Miss L. W. Cringan, P. W. M. Curry, xG. M. Dobbins (pharmacology), T. L. Dobson, xW. L. Graydon (pathology), A. V. Greaves, A. C. Greenaway, H. A. Hessian, L. R. Hill, W. E. Jones, A. W. Knox, N. H. Little, W. A. Lowe, W. E. Martin, xA. J. Moody (pathology), H. C. McAlister, A. R. MacDonald, C. MacKay, xA. J. McIntosh (pharmacology), V. P. MacMahon, H. C. Nash, xP. Peacock (pharmacology and pathology), J. R. Rehill, T. A. Sinclair, R. J. Snider, G. H. Stobie, G. E. Tanner, Miss M. Tryon, Miss B. H. Wilson.

Second Examination—Pass—W. B. Barnes, Miss M. B. Becker, C. E. Bond, Miss L. W. Cringan (passed in bacteriology of the second year), F. W. W. Hipwell, F. W. Leech, B. S. Loney, C. V. Mills, J. H. Macdonald, W. S. McKeough, W. J. Scott, G. K. Shirton, xM. H. Soules (anatomy), E. L. Stoll, C. E. Thompson.

First Examination—Pass—W. H. Batten, B. R. Burns, C. J. Devins, T. B. Feick, D. H. Fraser, xW. H. Gray (biology), C. E. Hill, H. O. Jones, Miss C. I. M. Kennedy, Miss F. M. Meader, P. D. McIntosh, J. H. Nesbitt, G. H. Ramsey, I. B. Roger, N. H. Russell, R. A. Seymour, M. Siegel, B. C. Sullivan, H. Sullivan, W. A. Thomson, F. N. Walker, A. T. Whealy. F. W. Leach passed in the subjects of chemistry and embryology.

ORCADIAN OBSTETRIC CUSTOMS.

In the January number of *Old Lore Miscellany of Orkney*, quoted in the issue of the *British Medical Journal* for May 9, 1914, is an article by Mr. John Firth on Orcadian obstetric customs, actually observed within the memory of persons still living.

“The chief care of an Orcadian mother and her attendants at such a time seems to have been to preserve the newborn baby from the unwelcome attentions of ‘peerie-folk’ or fairies, who were always on the lookout for a human child to kidnap or bewitch. To frighten them away, therefore, the mother kept beside her in the bed a Bible and a knife, the fairies of Orkney being apparently as much alarmed at the sight of these objects as the ‘Good People’ of the Border were said to be by the homely blue bonnet when it reposed on the bed of a lying-in woman. To ‘make assurance double sure,’ however, relays of neighbors were called in for several nights to rock the cradle and shield its occupant from the nocturnal attacks of its mischievous enemies. A careful father, moreover, would ensure his child’s future prosperity by arranging for its first drink to be taken off silver; and many were the expedients resorted to in poor homes, the most usual being to place a silver coin (frequently borrowed for the occasion) in the horn spoon, which served as the baby’s pap-boat. Orcadian children must have been a hardy race, for in those days the first nourishment administered to the newly-born infant was a teaspoonful of toddy, and not infrequently both mother and nurses were anything but sober at the time of his birth. The nursing, therefore, both of mother and child, must have been of the most primitive description, and ‘this combined with the fact that it was but seldom that a doctor or a trained accoucheuse was called, clearly shows that the successful result of such incompetent obstetrics may be perinently described as ‘the survival of the fittest.’ ”

SCULTETUS ON GUNSHOT WOUNDS.

At the present time the following translation of a passage from Scultetus’s *Armamentarium Chirurgici*, written in 1672, is of special

interest as illustrating the seventeenth century method of treating gunshot wounds:

“In the year 1534 Johannes Philippus Schmid, captain of the watch at Ulme, was wounded with a bullet through the shoulder in the battle near Nordingen, and coming to Ulme fell into the hands of an unskilful chyrurgion, who kept open the orifices of the wound, not with tents, but with a seton passed through, which caused so great a pain that gangrene followed upon the inflammation; to whom coming by chance, I presently removed the seton and applied a cataplasm made of the meal of mallows and rose-water, and keeping his belly open with a lenitive glyster, for revulsion sake, I took away seven ounces of blood from his left arm, which was bilious and serous; and the next day the gangrene amending, the patient took a potion to purge choler, which gave him ten stools. The ingredients of the potion were syrup of roses, extract of rhubarb, diacarthamum, magistery of tartar, and ‘burrage water.’ The wonderful efficacy of this cataplasm, the patient being recovered, thinks he can never enough commend, and ascribeth to it the sole preservation of his arm.”

MEDICAL PREPARATIONS

THE PNEUMONIA CONVALESCENT.

In spite of all the modern advances in scientific therapy, and the improvements in the general handling and management of acute infectious diseases, acute lobar pneumonia still deserves the title ascribed to it by Osler: “The Captain of the Men of Death.” There are, however, especially during the fall and winter months, many cases of the lobular or irregular pneumonia that so often complicates or follows la grippe. When this condition supervenes it is more than likely to follow a sub-acute or chronic course and convalescence is frequently long delayed. Under such circumstances, in conjunction with treatment designed to hasten resolution, a general blood tonic and vitalizing agent helps materially to shorten the convalescent period. Pepto-Mangan (Gude) is of much value in this field, because it not only increases the solid elements of the blood, but also acts as a true tonostimulant to the organism generally. As Pepto-Mangan is free from irritant properties and constipating action, it is especially serviceable in the reconstructive treatment of the devitalization following the pneumonia of the aged.

A PHYLACOGEN FOR TYPHOID FEVER.

An advertisement that will undoubtedly occasion widespread interest among physicians is appearing in current medical journals over the signature of Parke, Davis & Co. We refer to the announcement of Typhoid Phylacogen. The new product is prepared from pure cultures of the bacillus typhosus of Eberth and Mixed Infection Phylacogan. As the name signifies, this latest Phylacogen is indicated in the treatment of typhoid fever or any pathological condition due to infection with the bacillus typhosus. Before being formally offered to the medical profession Typhoid Phylacogen was subjected to rigid clinical tests extending over two years. The most significant fact developed by these investigations appears to have been the prompt amelioration of symptoms and rapidity of recovery in successful cases. Indeed, it is evident that, when properly treated, recovery not uncommonly takes place in approximately half the time required under conventional methods.

Parke, Davis & Co. have issued a 32-page brochure on Typhoid Phylacogen, which deals in extenso with the new method of treatment, discusses diagnosis, dosage, technique of administration, etc., and reproduces a favorable paper by a prominent physician of Montreal, read before the Medical Society of that city and later published in *L'Union Medicale du Canada*. The doctor refers at some length to a number of hospital cases treated, and concludes his paper with the significant observation that "the treatment of typhoid fever with Phylacogen gives real results." Physicians are advised to send for a copy of this "Typhoid Phylacogen" pamphlet, addressing their requests to Parke, Davis & Co., Walkerville, Ont. Eastern depot, 378 St. Paul St., Montreal, Que.

GLYCO-THYMOLINE FOR COLDS.

At this season of the year the crop of "colds" becomes very numerous.

One of the first efforts of the physician aims at relieving the congestion of the nasal mucous membrane and bring some degree of comfort to his patient.

Glyco-Thymoline in a 25% solution, used in connection with the K. & O. Nasal Douche, not only cleanses the nasal passages of the mucous secretions, but also reduces the congestion by its exosmotic action, thereby giving the patient a degree of comfort that will be thoroughly appreciated.