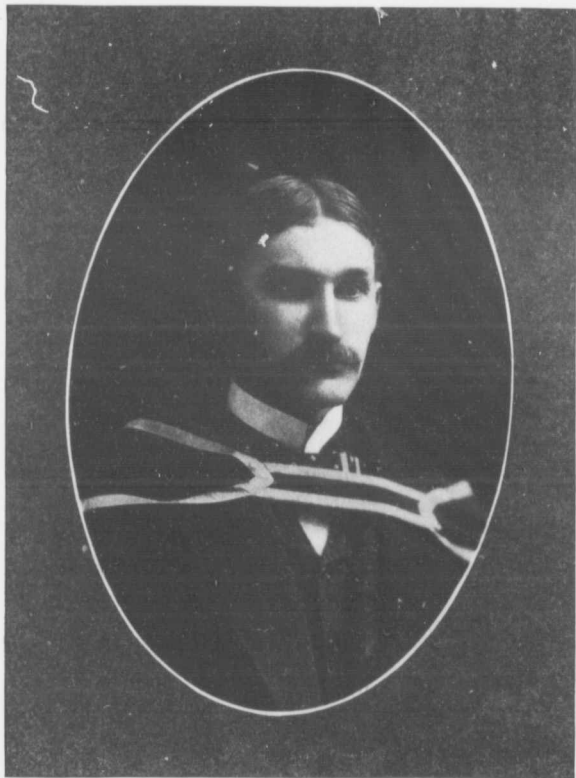


J. George Adams.

OBITUARY.

—
PROFESSOR WYATT GALT JOHNSTON.

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THE LATE WYATT GALT JOHNSTON.

Obituary

PROFESSOR WYATT GALT JOHNSTON.

The death of Professor Wyatt Johnston, which occurred on the 19th of June, from pulmonary embolism, deprives the profession of Canada of one of its most brilliant and original members. His death was due to septic poisoning acquired in the autopsy room of the Montreal General Hospital. A streptococcus inoculation of his hand in February last incapacitated him for work for a few weeks, but he returned again to his duties, and probably received a second infection in April. A thrombus appeared in the internal saphenous vein of his left leg about the end of April, followed by a more extensive coagulation later. He then removed to a private ward in the General Hospital, and shortly after this the veins of the other leg became similarly affected, and there was evidence of the presence of thrombi in the iliac veins of both sides. Death resulted on the 19th of June from a pulmonary embolism. The autopsy showed extensive thrombi on both sides and a general streptococcus and diplococcus infection.

Dr. Wyatt Galt Johnston was the son of the late Dr. J. B. Johnston, of Sherbrooke, Que. He received his early education at Bishop's College, Lennoxville, and entered upon the study of medicine in McGill University in 1880, graduating in 1884. As a student he showed special aptitude for pathology, and was a constant associate of Dr. Osler, assisting him at autopsies and preparing material for demonstration. Immediately after graduation he became resident medical officer in the General Hospital, and during the period of his service had more than the usual responsibility on his shoulders, as the staff that year was small and continually changing. In the spring of 1885 he paid his first visit to Germany, working during the summer in Virchow's laboratory in Berlin. Next year he returned again to Germany and carried on researches in connection with pernicious anæmia in the laboratory of Professor Grawitz at Greifswald. He was appointed demonstrator in pathology at McGill, and alone he gave all the lectures and demonstrations in this department for a number of years. He subsequently returned to Germany and worked at comparative pathology in Munich and also for some months in the Zoological Gardens in London. Shortly after this he resigned his position in pathology in McGill, but still continued to work in the General Hospital, devoting himself almost exclusively to bacteriology and beginning his medico-legal work.

In 1890 he made a bacteriological study of the water supply of Montreal, including the bacteriology of surface water generally. His very thorough report on the methods of classification of water bacteria and their sanitary importance was widely published. He was appointed lecturer in bacteriology at McGill in 1895, and was connected with the departments of pathology and hygiene. About this time also he became bacteriologist for the Provincial Board of Health and medico-legal expert for the district of Montreal. In 1897 he was made Assistant Professor in Public Health and Lecturer in Medico-Legal Pathology, and only a few months before his death received the chair of Hygiene and director of that department in the Faculty of Medicine, McGill University. He had practically occupied this chair for the Sessions 1900-01, and 1901-02, but until just before his death he was not formally appointed.

In December, 1895, he married Julia, daughter of the late Michael Turnor, of Rugely, England.

Professor Johnston's career has been a varied one ; from pathology proper he proceeded to the study of comparative pathology and spent a year in the investigation of the Pietou Cattle Disease. During this period he was associated with the Faculty of Comparative Medicine in McGill University as well as the Faculty of Medicine. Becoming more interested in bacteriology, he made a specialty of the sanitary application of this science, and was recognized as one of the best authorities on the subject of the bacteriology of water supplies. Originality, inventiveness and the power of recognizing the simplest and most direct method of reaching results, characterized his work in every department. While engaged in the investigation of the water supply of Montreal, he devised a very rapid and convenient method for collecting samples of water at various depths in such a way as to exclude the possibility of contamination. He also devised a method of distinguishing and counting the various animalcule found in surface waters. When engaged in bacteriology in the General Hospital, his simple method for the diagnosis of diphtheria by culture on hard-boiled eggs, which is even now very widely used, was announced. His modification of the Widal reaction for the diagnosis of typhoid by means of dried serum, is also widely in use in different countries. An indefatigable worker, he tried all the methods announced that gave promise of practical value in connection with the application of bacteriology to hygiene and medico-legal work or to the diagnosis of disease. Having studied these methods, they were either immediately discarded or utilized in his work, and almost invariably improved upon or simplified. Instance after instance occurs to the writer where his inventive genius has made practical and useful many laboratory methods in bacteriology and pathology, and so to a great

degree simplified the method of instruction or economized the time of both student and demonstrator.

Dr. Johnston's habit of mind, his rapidity of thought and quickness in seizing upon what was of immediate importance, makes his published writings a very poor index of the amount of work he accomplished, and only to those who knew him do they give anything but an imperfect idea of the soundness and extent of his knowledge. His mental habit of concentration and going to the root of the matter, neglecting all side issues, which made him so valuable and trustworthy as a medico-legal expert and a coroner's physician, showed itself in all his research. A given problem presented itself to him, and he worked at it until he had satisfied himself with regard to that problem only, and being satisfied with results, was extremely careless in placing them upon record. His papers are characterized by directness, they are unaccompanied by any full or orderly history of the development of his subject up to the point at which he took it in hand, and he was content, as a rule, to incidentally refer to the work of others which he was able either to confirm or refute. These references, however, were always adequate for those familiar with the matter, but not always so for the ordinary professional reader. The difficulties which he encountered in attacking the problem, the side issues which sprang up in the course of his investigations, were rarely more than hinted at; the part of the subject which interested him and which impressed him with its importance was recorded red hot. Thus his published papers, an incomplete list of the more important of which follow this notice, are apt to strike the reader as being short and hurried, and certainly do not do him justice. But one has only to glance over the list to appreciate his remarkable versatility.

His mastery of many allied branches of medicine, gross and microscopic pathology, both human and comparative, bacteriology in a more abstract form as well as in its applications to hygiene and public health, sanitation, medical jurisprudence in many aspects, as well as medical education, will be found among his contributions. To each of these subjects he made valued and pre-eminently practical contributions, endeavouring to popularize each subject and to bring its methods within the reach of those to whom it would be useful.

Of recent years he devoted himself to hygiene and medical jurisprudence. One of his most thorough studies in the department of medical jurisprudence, in which he probably stands pre-eminent in Canada, if not on this continent, was a method of determining the pecuniary equivalent of injuries to one or other portions of the body, a subject which was very largely neglected by English-speaking medical jurists, although it has been very scientifically investigated in France and Germany. About the time of his death he was negotiating a scheme for the use of

companies with a large number of employees, and accident insurance companies, which would enable them to follow the after-effects of injuries and the conditions and treatment after leaving hospital, forming a basis from which valuable statistics could be compiled in this country and in the United States.

As a teacher, the same characteristics showed themselves, his great mental activity and his rapidity of thought often made it difficult for him to exhibit to his hearers the process by which conclusions were reached, hence, it was always necessary for him to carefully prepare his set lectures. But in practical teaching, at the autopsy table, at his weekly demonstrations in morbid anatomy, and, above all, to a few interested students, graduates or assistants in the laboratory, he was at his best. In devising methods of demonstration and of checking the work of classes in the laboratory, his originality was of much value. He was never contented unless he could develop some simple method of staining, some simple apparatus for class purposes, or for reproducing diagrams in a few minutes; method after method occurs to us all alike in their directness, simplicity and effectiveness for the purposes for which they were designed. He had a perfect genius for recognizing what was at the same time practical, scientific, sound and capable of performance by the simplest means.

In addition to his methods for the diagnosis of diphtheria and typhoid fever, already referred to, his simple method for the diagnosis of leprosy by scraping a suspected cutaneous nodule and staining the mixed blood and lymph, which exudes, and his introduction of the ordinary sterilized cotton wool swab at the end of a length of strong wire enclosed in a test tube, which now-a-days is used in all public health diphtheria outfits, may be cited as examples of how he always thought of the most direct and simplest methods of reaching his results.

But, after all, it is Wyatt Johnston, the man, the delightful companion, whose wit was ever full of such delightful surprises, that his friends and associates will regret the most. Intellectually honest, direct and simple to an unusual degree, he had the greatest contempt for all that savours of dishonesty and pretence in scientific work. His wonderful personal magnetism, his ready wit and sympathy, made him hosts of friends and admirers among those associated with him in the various organizations and societies with which he was connected—the Bar of Montreal, the Coroner's Court, the General Hospital, the Provincial Board of Health, the American Public Health Association, the American Medical Association, the American Medico-Legal Society, the Montreal Medico-Chirurgical Society, the Faculties of Law and Comparative Medicine.

The following resolution of regret, passed by the Faculty of Medicine, is but one of the many echoes of sorrow which has reached us from all parts of Canada and the United States:—

"The Members of the Faculty of Medicine of McGill University wish by this Resolution to put upon record their recognition of the great loss they have sustained by the untimely death of their brilliant colleague, Professor Wyatt Johnston.

"Throughout the twenty-one years during which he was associated with this Faculty, as student, demonstrator, lecturer and professor, his work was always characterized by a rare degree of conscientious exactness and originality. An earnest student, a thorough and successful investigator, and ever an advocate of advanced scientific medical education, his loss to the Faculty is indeed a great one.

"To his exertions this Faculty owes the practical character of the teaching in the various departments of State Medicine, with which he was connected, and also the introduction of advanced and post-graduate courses leading to the diplomas of Public Health and Legal Medicine.

"His high status among scientific men as a trustworthy investigator, especially in the fields of bacteriology and preventive medicine, has added not a little to the reputation of this University as a centre for research. His reputation as a reliable and scientific medical jurist and expert, was not confined to this city or this country, and his services to the Courts of Justice have done much to demonstrate to the professions of Law and Medicine the value of this branch of medical education.

"His colleagues in the Faculty of Medicine feel that in his untimely death each has lost a bright and cheering companion and a friend whose earnestness of purpose and enthusiasm in his work was a stimulus to all who came in contact with him,—one who was a high type of intellectual honesty combined with singular simplicity and modesty regarding his own capacity and the importance of his valuable original work.

"The Faculty further resolves to transmit a copy of this Resolution to Mrs. Wyatt Johnston and to his mother, Mrs. J. B. Johnston, and to convey to them their deep and heartfelt sympathy in the great loss which they have suffered."

The following is an uncomplete list of his more important contributions to scientific literature:—

Retrospect of Pathology—MONTREAL MEDICAL JOURNAL, 1889.

Thymus Gland—Reference Handbook of Medical Sciences, 1899.

Thyroid Gland—*Ibid.*

Retrospect of Pathology—MONTREAL MEDICAL JOURNAL, 1890.

An Unusual Case of Perityphlitis—MONTREAL MEDICAL JOURNAL, 1890.

A Rare Form of Kidney Tumor—MONTREAL MEDICAL JOURNAL, 1891.

Notes on the Bacteriological Study of Diphtheria—MONTREAL MEDICAL JOURNAL, 1891.

On the Collection of samples of Water for Bacteriological Analysis—*Canadian Record of Science*, 1892.

A new Method for the Culture of Diphtheria Bacilli in Hard-boiled Eggs—*The Medical News*, 1892.

Anomalous Cases of Primary Nasal Diphtheria—MONTREAL MEDICAL JOURNAL, 1892.

Fracture of the Skull from the Discharge of a Shot-gun into the left Orbit—*Montreal Medical Journal*, 1893.

Six months' Medical Evidence, Coroner's Court of Montreal—MONTREAL MEDICAL JOURNAL, 1893.

One Hundred Cases in Coroner's Court of Montreal in 1893—MONTREAL MEDICAL JOURNAL, 1893.

Return to an Order of Legislative Assembly of December 13th, 1893, upon Coroner's Inquests—1893.

"Coroner's Quest" Law in the Province of Quebec—Read before Medico-Legal Society, May, 1893.

Report of Special Committee appointed by Montreal Medico-Chirurgical Society to amend Coroner's Law for Province of Quebec—MONTREAL MEDICAL JOURNAL, 1894.

Coroners and Inquests—*The Gazette*, February 8th, 1894.

Statistics of Coroner's Court, Montreal, for 1893—MONTREAL MEDICAL JOURNAL, 1894.

A Biological Analysis of Montreal Water Supply from November, 1890—November, 1891—MONTREAL MEDICAL JOURNAL, 1894.

The Use of the Autoclave for Sterilizing Nutrient Gelatin—*The Medical News*, 1895.

A few Observations upon Sedimentation in Water—Trans. American Public Health Assoc., 1895.

On Grouping Water Bacteria—Trans. American Public Health Assoc., 1895.
Clinical Microscopy—Reference Handbook of Medical Sciences, Supplement, 1895.

Thymus Gland, Development of—*Ibid.*

Thyroid Gland, Pathology of—*Ibid.*

Biological Analysis of Water—*Ibid.*

Report on a Year's Work on Bacteriological Diagnosis of Diphtheria—MONTREAL MEDICAL JOURNAL, 1896.

On the Application of the Serum Diagnosis in Typhoid Fever—*New York Medical Journal*, 1896.

A Note upon Serum Diagnosis by means of Dried Blood Samples in (Experimental) Cholera—*New York Medical Journal*, 1896.

Ueber den Gebrauch von im Wasser aufgelosten trockenen Blute für die Serumdiagnose des Typhus—*Centralblatt für Bakter. Parasit. u. Infekt.* XXI. Band, No. 13/14, 1897.

Three cases illustrating the Value of Bacteriological Diagnosis of Leprosy for Public Health Purposes—MONTREAL MEDICAL JOURNAL, 1897.

On the Difference between Blood Serum and Blood Solutions, the Condition of the Test Culture and Significance of Bacterium Coli Infection in Relation to Typhoid Diagnosis—MONTREAL MEDICAL JOURNAL, 1897.

On the Iodide Test for Semen—*Boston Medical & Surgical Journal*, 1897.

On the Medico-Legal Application of Entomology—MONTREAL MEDICAL JOURNAL, 1897.

- Notes on Household Disinfection by Formaldehyde—*British Medical Journal*, 1897.
- An Experiment with the Serum Reaction as a Test for Typhoid infection in Water, etc.—*New York Medical Journal*, 1897.
- On the Application of the Serum Diagnosis in Typhoid Fever to the Requirements of Public Health Laboratories—*Trans. American Public Health Assoc.*, 1897.
- Compilation of Pathological Reports of Montreal General Hospital from 1883-1895, August, 1897.
- The Medico-Legal Significance of the Presence of Sugar and Glycogen in the Liver, Post-mortem—*Boston Medical & Surgical Journal*, 1898.
- Cardiac Embolism—MONTREAL MEDICAL JOURNAL, 1898.
- The Condition of T-st Cultures, especially as regards filtration, favourable to clear Serum reactions by the Dried Blood Method—*British Medical Journal*, 1898.
- On Serum Reaction with Bacteria other than the usual Pathogenic Forms—*British Medical Journal*, 1898.
- A Quantitative Method of Serum Diagnosis by means of Dried Blood—*British Medical Journal*, 1898.
- Notes on Progress of Legal Medicine—the Medico-Legal Study of Injuries—*Philadelphia Medical Journal*, 1898.
- Death by Electricity—MONTREAL MEDICAL JOURNAL, 1898.
- Legal Medicine—*American Yearbook of Medicine & Surgery*, 1898.
- Recent Work Bearing on the Pathology and Morbid Anatomy of Shock—*The Railway Surgeon*, 1899.
- Some Personal Experiences in Disinfection—*Trans. American Public Health Assoc.*, 1900.
- On the Practical Clinical Teaching of State Medicine—*Philadelphia Medical Journal*, 1900.
- Legal Medicine—*American Yearbook of Medicine & Surgery*, 1900.
- On the Estimation of Disability and Disease Due to Injury—Read before Montreal Medico-Chirurgical Society, January, 1900.
- On the Establishment of Medico-Legal Diplomas—*Boston Medical & Surgical Journal*, 1901.
- A simple Method for Bacteriological Examination of Milk Supplies—MONTREAL MEDICAL JOURNAL, February 1902.

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