

GEORGE CRILE, M.D.

1864 - 1943

FOREWORD

A MEMORIAL SERVICE was held for Dr. George Crile at the Amasa Stone Mather Chapel of Western Reserve University on January 24, 1943. This issue of the Cleveland Clinic Quarterly is dedicated to the memory of Dr. Crile in order to bring to his many friends and admirers the addresses that were presented.

GEORGE CRILE MEMORIAL SERVICE

AMASA STONE MATHER CHAPEL SUNDAY, JANUARY 24, 1943

WILLIAM E. LOWER, M.D.

A Founder and Former Treasurer

Friends and Colleagues:

We are meeting today to pay tribute to the memory of a great humanitarian. After many years of close and continuous professional association with George Crile, my sorrow is too deep, my memory too acute, and my heart too saddened at his going to speak of him in a personal way at this time. I shall leave it to the other colleagues and friends here to evaluate his influence as a teacher, a surgeon, an investigator, and an organizer.

I present Dr. Leutner who will preside.

WINFRED GEORGE LEUTNER, Ph.D., LL.D., presiding President, Western Reserve University

IN THIS GATHERING of former students, of close professional associates, of grateful beneficiaries of his professional skill, and of intimate friends of Dr. George Crile, and in the presence of those nearest and dearest to him, it is our fitting purpose not now to grieve, although our grief has been deep and real, but to give expression to our regard for him and to our gratitude that we have had the privilege of long and fruitful companionship with him.

We would here contemplate the lineaments of his rich personality and his accomplishments as he moved familiarly among us, going about his ministry to man, and about his absorbing labors in the study of man. Through this contemplation we would soften our sense of loss, gain inspiration for our own efforts to "carry on," and gather hope and faith in the validity of man's age-long struggle for progress toward divine perfection — an ideal ever seemingly just beyond our reach as we raise our own sights to higher levels, but ever continuing to beckon us onward.

It is my privilege to refer briefly to the earlier years of Dr. Crile's long career, which included intimate participation in medical education.

A Bachelor of Arts of Ohio Northern University, and grounded in the study of medicine in the medical department of Wooster University, he began his teaching career in 1889 in his medical alma mater. After intervals of study in Vienna, London and Paris, he achieved the position of Professor of the Principles and Practice of Surgery. Then, in 1900, when the medical department of Wooster was merged with the School of Medicine of Western Reserve University, he entered the service of this University as Professor of Clinical Surgery, to become Professor of Surgery in 1911, and Visiting Surgeon in Lakeside Hospital. This dual position he held until his retirement from university teach-

ing in 1924 as Emeritus Professor of Surgery, a title of honor retained until the end. The University is happy to acknowledge its debt and its gratitude to him.

In those earlier years of medical education and research in Cleveland, Dr. Crile contributed the luster of his own life, personality, and skill to the distinguished group then associated with the University and Lakeside Hospital: Doctors Allen, Parker, Bunts and Hamann in Surgery, Edward Cushing, Lowman and Hoover in Medicine, to mention only a few of those whose services the University and the community enjoyed and who have since passed on.

It was in the period of his work at the University and at Lakeside Hospital that he organized the Lakeside Hospital Unit and was its professional director in its service overseas during World War I. Others will speak this afternoon in more detail of Dr. Crile's professional accomplishments, his contributions to science, his leadership in the founding and operation of the now renowned Cleveland Clinic Foundation and Hospital.

Let me refer only summarily to the fact that recognition came to him as early as 1897 when he was awarded the Cartwright Prize by Columbia University, and that honors native and foreign, academic, professional and civic continued to be bestowed upon him with amazing regularity during his active career. His publications began to appear at least as early as 1897 and continued for more than forty years. His interest in military medicine, too, dated back to his early experience in the Spanish-American War as Major in the Medical Corps and held him until the very end.

A driving vitality and a restless spirit activated him; an extraordinary breadth of scientific interest and daring characterized him. These, coupled with his great skill as a surgeon, won for him the admiration and confidence of patients, students, and the profession.

Speaking to us on behalf of the Board of Trustees of the Cleveland Clinic Foundation, a member of the Board, is our beloved friend and neighbor, Dr. William E. Wickenden, President of the Case School of Applied Science.

On behalf of the American Medical Association, will speak its President, himself a distinguished surgeon and teacher, now carrying heavy responsibilities for the care of our armed forces as an officer in the Medical Corps of the United States Army—Brigadier General Fred Wharton Rankin, Clinical Professor of Surgery at the University of Louisville School of Medicine.

Dr. Crile was long active in the affairs of the American College of Surgeons and was its President in 1916. It is particularly fitting that this notable College should be represented here today by one of its distinguished and veteran Fellows, Dr. Irvin Abell, who in 1939 succeeded Dr. Crile as Chairman of the Board of Regents of the College.

We thus seek, friends, to have our presence at this service and what we gratefully hear to be to Dr. Crile a tribute of our esteem for him as a teacher, surgeon, and scientist and of our deep and lasting affection for him as an admired and well-loved friend and a courageous gentleman.

WILLIAM E. WICKENDEN, Sc.D., LL.D., L.H.D. President, Case School of Applied Science

We have gathered this afternoon to pay such honor as reverent silence and halting words can express to the memory of a great man. All such occasions bear witness to the poverty of language. When thought becomes too deep for words, we instinctively turn to symbolism to create the bond of a consciousness profoundly shared for which we can find no voice. The Quakers have made of their collective silence such a rite as seems most fitting for this hour.

This reverent silence is not a symbol of mourning; it is an act of rejoicing for a life nobly fulfilled, for a friendship sincere and unaffected, for an inspiring comradeship in great undertakings, for a service to suffering men which was fruitful and potent in future possibilities, for a heritage of new and at times startling knowledge, for trails of investigation broken into new territories which may need generations fully to explore, but most of all for a man who lived among us making vividly real traits of kindness, generosity, fortitude, devotion, and dedication to ideals which elevate human character to its maximum.

Others will speak of his achievements as teacher, as soldier, as surgeon, and as an organizer of professional life. My part is to speak of his adventures on the frontiers of knowledge. To speak of him as a pioneer in science would be true, but inadequate. To define is to confine, and genius is not to be so contained. Dr. Crile's passionate interest was *life*. As Sir Francis Bacon dared to take all knowledge as his field in the 17th century, so Dr. Crile dared in the 20th century to encompass all life by his researches.

It would be interesting to hear someone with adequate acquaintance and knowledge compare his career in the two great fields of his endeavor, that of a surgeon and that of an investigator. I suspect that such a commentator would find at some points striking contrasts, at others striking similarities. His discoveries in surgery were immediately practical. Quickly communicated to his colleagues and tested by them, the new knowledge and technique won prompt and positive acceptance and brought him eminence, numerous honors, and substantial material rewards. His researches, pursued with equal zeal and originality, led him to revolutionary concepts which it will take a generation fully to appraise. Few received immediate acceptance, many have needed to be revised in the light of new evidence, and others are being weighed with cautious skepticism.

His personal reactions to the brilliant success of his pioneer work in surgery and to the critical skepticism awakened by his pioneer work in science bore witness to the essential consistency and greatness of his character. Kipling has put something of this into his oft-quoted words,

"If you can meet with Triumph and Disaster And treat these two imposters just the same . . ."

Honors Dr. Crile received with unaffected modesty and self-effacement, disaster with unfailing equanimity, and criticism with a generous tolerance. Those who knew him best never heard him boast of his successes nor speak unkindly of his critics.

These simple but great qualities were immediately apparent to all who came in contact with him. I recall vividly my first extended talk with him and circumstances which developed shortly thereafter to throw his qualities as an investigator and as a man into bold relief. It was about 1930, I believe, when I visited his laboratory at his invitation to see some of his much debated work on autosynthetic cells. As many of you will recall, Dr. Crile had taken certain substances originally derived from living tissues, but wholly dissociated and inert, and had reassociated them in his laboratory, only to find that they spontaneously tended to reassume an organized state which exhibited nearly all the essential attributes of protoplasmic life. Later he prepared an extensive exhibit of his experimental results together with a paper of some length for the national meeting of the American Association for the Advancement of Science which was held in Cleveland. Through an unfortunate turn of circumstances, the paper itself was not

actually presented, but the press release, which had been prepared in advance, was given wide and embarrassingly sensational publicity.

At once a storm of criticism broke, throwing the merits of the work into obscurity and involving Dr. Crile in a controversy which may have cost him high scientific honors for which his friends had confidently hoped. High above the storm towered his freedom from resentment. "Struggle," he had written in another connection, "is a biological necessity, and even war is preferable to pusillanimous peace leading to degeneracy."

His career as a surgeon and as an investigator are linked together by a common spring of interest as well as by qualities of character revealed under contrasting circumstances. As a surgeon, so his close associates have told me, his genius lay less in the realm of anatomy than in the realm of function. His concern was not so much to put the structure of the body to rights as to make it function with its normal perfection. This was a quality which endeared him to laymen. Bodily structure is something complex, august, and remote to the consciousness of most of us, but body functions are the things we live with every conscious hour.

It was this enthusiasm for knowledge of the body's functions, of the sources of its energy, and of the mechanisms of its control that he carried over into his tireless work as an investigator. At once he found himself in new territory, without survey maps and with trails unblazed. He could be a settler, clearing a small patch on the boundaries of our ignorance and painstakingly bringing it into a state of careful organization, or he could be an explorer, mapping out the new terrain in its large dimensions and opening trails for less original or imaginative men of cautious, pedestrian habits to follow. The role of explorer was more inviting to the daring qualities of his genius. As an explorer, the wide-ranging methods of an aerial survey were more to his taste than those of slow travel with a pack horse.

This wide-ranging quality, guided by an exceptionally fertile imagination, distinguished him in unmistakable contrast to the meticulous discipline of detail observed by the ordinary scientist. His concern over the energy of life and the mechanisms of its release and control led him irresistibly into the realm of physics, a realm where few medical

men had preceded him. Modern conceptions of electricity not only fascinated him, but also suggested ideas of the energy mechanism of life which he pursued with great enthusiasm and with highly fruitful results. He became convinced that the energy phenomena of life could not be explained by ordinary notions of chemical combustion, but that processes of electrical generation and distribution were involved, which led him to describe living organisms as "bipolar mechanisms constructed and energized by radiant and electric energy."

Mind he considered a product of electricity generated by matter and offered experimental evidence that the brain emits short wave and infra-red radiations, and that the ejection of electrons from brain cells sets up electric currents responsible for all our thinking and reasoning processes. These were revolutionary doctrines, more congenial to physicists and engineers than to medical men and biologists of an older school.

The most monumental of his later investigations and the one most completely exemplifying his qualities as a wide-ranging explorer rather than as a verifier and compiler of scientific detail was his study of intelligence, power, and personality in man and animals. It is impossible to describe this quest with greater directness and lucidity than Dr. Crile does in the introduction to his book of this title, from which I quote with some condensation:

"One of the mysteries of the human race is the fact that civilized man is subject to certain diseases that rarely attack primitive man and never appear in wild and domestic animals. ... Each of these diseases is related to the expenditure of energy. It would appear that this fact alone offers a biological clue to the mechanism of the energy characteristics of man and animals.

"It is well known that only certain organs and tissues control the expenditure of energy in all animals, including man. These are the brain, the heart and the blood, the thyroid gland, the adrenal glands, the celiac ganglia, and the sympathetic system.

"I postulate that if we were to analyze, measure, and compare the organs of this energy-controlling system in fish, reptiles, birds, and mammals and then compare the influence of the heat of the tropics and the cold of the arctic upon the size of these organs—heat and cold and

struggle and survival being the most potent of all environmental influences—we should be able to account for the varying intelligence, power and personality among the different species of animals and the races of man. We should be able to find for man an energy formula distinct from that for wild and domestic animals and, further, an energy formula for civilized man. This became our quest."

A striking parallel can be set up between the quest of Charles Darwin a century ago and that of George Crile within the last decade. Darwin's classic voyages on the Beagle, his wide-ranging observations on the form and structure of living organisms, his monumental compilation and synthesis of facts, and his final propounding of the theory of evolution to account for the origin and variation of species, all have their counterpart in the quest of Dr. and Mrs. Crile and their research colleague, Dr. Quiring, over wide areas of the equatorial, the temperate, and the arctic zones; the detailed examination of the comparative anatomy and physiology of the energy-controlling organs of 3,734 animals, ranging from small rodent to massive whale; the correlation of these data by rigorous mathematical analysis; and the propounding of the conclusion that the intelligence, power, and personality of man and animals seems to be dependent on the absolute and the relative sizes of the brain, the heart and blood volume, the thyroid gland, and the adrenal-sympathetic system. As Darwin had sought to account for differences of form and structure, Crile had sought to account for differences of behavior and function.

Both theories were received with critical skepticism in the world of science. It has taken a century to appraise Charles Darwin's greatest work; it may take a century to appraise that of George Crile. He himself would not have it otherwise. Dr. Crile professed no conventional religious creed, yet exhibited faith of the profoundest quality—faith that the truth, whatever it may be and wherever it may lead, has enduring worth for life; that man's destiny is not to be expressed in finality of attainment, but in an unending quest.

FRED WHARTON RANKIN, M.D., Sc.D., LL.D., F.A.C.S. Brigadier General, Medical Corps, U. S. Army President, American Medical Association

As EMISSARY of The Surgeon General of the United States Army and as the President of the American Medical Association, I wish to express the gratitude I feel for the opportunity to take part in these memorial exercises.

As a representative of The Surgeon General of the United States Army, I convey the appreciation of that branch of the War Department for the benefits which have accrued to members of the armed forces of this country through the application of the investigations and teachings of Dr. Crile. Nowhere more than in the care of war casualties suffering from traumatic shock have the principles of anoci-association which he enunciated and the practices which he established found more direct and widespread application. Thousands of lives have already been saved by an appreciation of the role which the gentle handling of tissues plays in the prevention of shock—a principle which he imbued in the surgeons of America through the forceful presentation of his concepts and observations. Coupled with his studies on shock were his pioneer achievements in the field of blood transfusion. His wide experience in the application of this life-saving procedure has been important in the accumulation and availability of the vast stores of human blood plasma which now serve as a bulwark of protection against shock and hemorrhage. In addition to his studies on shock and his work on blood transfusion, the development and perfection of techniques for repairing blood vessels constitute a protecting arch over the lives of our soldiers, an arch in which his work on shock can be likened to a keystone, supported by his contributions to blood transfusion and vascular surgery. The benefits which will eventually accrue to military personnel from the application of the tenets which he espoused can hardly be adequately estimated.

It is unquestionably true that his experiences in military service exerted a definite influence upon George Crile's interests and work. During his lifetime he served his country in two wars, first in the Spanish-American War, and later in World War I. As early as 1915 he proposed the unit organization of American base hospitals, for he believed that "mediocrity well organized is more efficient than brilliancy combined with strife and discord." When this country entered the war, he had already had charge of the Western Reserve University Unit for service in France. Small wonder, then, that his Lakeside Hospital Unit (No. 4) was the first to go abroad with our own forces in 1917. As a Major and a member of the Committee on General Surgery, he enumerated what he considered to be the ten leading war problems then confronting military surgeons. It is of interest today to recall them:

- 1. Eradication of lice, fleas, and scabies
- 2. Trench nephritis
- 3. Trench heart
- 4. Trench fever
- 5. War neurasthenia
- 6. Lethal gases
- 7. Shell concussion
- 8. Wound infection
- 9. Treatment of compound fractures
- 10. Exhaustion

He not only drew attention to all of these problems, but also contributed to their solution.

As a spokesman for the American Medical Association and its affiliates, I voice the gratitude of the medical profession of America not only for Dr. Crile's contributions to scientific medicine but also for his untiring efforts in establishing high standards of medical practice.

Destined to live through a period of tremendous change in medical practice, he contributed much in effecting those changes, as a teacher, as a medical administrator, and as an organizer. The great clinic which he developed is but a single monument to his vision and organizing genius. He has exerted an influence on so many phases of American medicine and surgery that he will long remain familiar to the lab-

oratory investigator, the teacher, the student, and the practitioner—whoever reviews the annals of medical history and progress.

I would respectfully express the admiration which he inspired me to hold for him as a clinician, sincere investigator, molder of men, and sculptor of medical practice in America. To me, Dr. Crile epitomized the great and fine features of an era in American history characterized by advances so rapid as to tax to the utmost the ingenuity of mankind—a period which demanded superior ability to effect speedy readjustments. The period of his lifetime was one which particularly required the guiding vision of men of his caliber in the arts, natural sciences, industry, and political sciences. He combined in a rare way those feelings, interests, and capabilities which made it possible for him to cope successfully with the kaleidoscopic changes which so rapidly and in such manifold ways affect the destinies of everyone. Undaunted, he cheerfully and avidly accepted the challenge of his times and seized upon the opportunities which it afforded.

A grand heritage was his good fortune, and this he nurtured and carefully cultivated. His remarkable abilities and accomplishments undoubtedly were due largely to his inexhaustible energy, coupled with a far-seeing vision and a high degree of imaginativeness. The eminence which he attained was no chance happening but was an outgrowth of the coordinated and controlled processes of thought and action which he early developed and then applied throughout his career.

A great commoner, humanitarian, artist, and true scientist, he possessed all these qualities, yet none interfered with, but rather augmented, intensified, and complemented the other. The inquisitiveness which led him to delve into the remote and the occult never interfered with his ability simultaneously to administer and apply his surgical skill in a most practical way as a master handicraftsman and practical surgeon. He repeatedly manifested the rare ability to follow or to be guided by his foresight, never allowing immediate exigencies to subjugate his idealism or to mar his perspective.

Throughout his career a rational approach was applied whenever necessary to problems which required abstruse or abstract thinking, yet without ever dulling his perception of the humanities and his appreciation of the frailities of mankind.

Starting in the anatomical school of surgery, George Crile was in the vanguard of surgeons who early recognized that the future progress of clinical surgery was contingent upon close linkage with appropriate elements of experimental medicine and the fundamental chemobiologic sciences. While participating in the transition which characterizes modern surgery, he stimulated and assisted others in the appreciation of the importance of the physiologic principles as applied to clinical surgery. His basic approach to surgical problems, however, neither disturbed his equilibrium nor caused him to lose sight of the importance of the mechanistic aspects of surgery which so inevitably depend upon exact anatomical knowledge.

Among his many remarkable attributes was a propensity which permitted him to indulge in, and unashamedly to profess, the beliefs which those less fearless and of weaker convictions would never venture even to suggest. His willingness to embrace and support new concepts represented a pioneer spirit which was innate and evidenced an experimental philosophy characteristic of the men who developed the great Middle West where he worked, and identified him as one of the great exponents of an American philosophy which embodied and was characterized by refreshing sincerity. In supporting new thoughts and concepts which he promulgated, he evidenced that degree of courage which is required to remain unaffected by the skepticism with which advanced thinking is always met. Adamant resistance to the changes in thought which he proffered was encountered by him no less than it has been encountered by all others who have ventured to deviate from established dogma. Nevertheless, in any review of the evolution and maturation of surgical thought throughout medical history, his contributions will remain prominently etched and will survive as epochal incidents.

The greatness of such a man cannot be measured alone in terms of his personal achievements. The encouragement which he gave to his associates and to the many young men in medicine who came within his sphere of influence made him in a sense a great architect and builder; through his preceptorship he unwittingly constructed many monuments in the forms of men whom he inspired, stimulated, and guided. Rare enough is a great man, but rarer still is the great man who can

submerge his personal interests and preoccupations sufficiently to enter into the lives of others.

To most of us, who even in our fondest and most expansive fantasies have hoped to justify our existence through the accomplishment of even one worth while thing in life, it is all but incomprehensible that one man could be master of so many and such diverse accomplishments as was George Crile. It would take us too far afield to attempt here a detailed list of his investigations and contributions to the sum of present medical knowledge. Such an account is the task of his biographer, and only such a complete account of his life and works can properly reveal his remarkable versatility. Such an account will necessarily include much more than his studies on shock, his experiences in blood transfusion, his contributions to vascular surgery, and his investigations on anesthesia. It would tell of his mastery of the difficult surgery of the neck, including the perfected operations on the thyroid with which his name has become so closely identified; his daring excursions into the realms of other endocrinologic disorders, and his influence on the development of surgery of the sympathetic nervous system. These were his contributions during an age which saw the discovery of the etiologic agents of infectious diseases, the recognition of the hormones, the identification and in many instances even the synthesis of the vitamins, and the tremendous expansion of our vision which resulted from the perfection of the optical microscope and the development of the electron microscope.

That the significance and merits of his works were appreciated by his colleagues both in medical practice and in the basic sciences is attested by the universal recognition which he received, by his membership in many professional societies, and by the honors which were bestowed upon him.

His personal life mirrored his professional accomplishments. He worked zestfully and lived joyously, endowed with boundless energy and purposeful enthusiasm. He was ambitious only in so far as the ends of his ambitions led to human betterment; his approach to every problem was distinctly creative. His kindliness pervaded both his personal and professional relationships. Never have I heard him remark unsympathetically or hurtfully about his friends or professional col-

leagues. It is no wonder that professional gentleness, which he so ardently espoused, was so dear to him, for it was, in fact, a reflection of the gentleness of his character.

That humility which is typically a part of the makeup of those who have the world view—those who belong to that ageless and undated group which throughout the development of civilization have made a permanent imprint through contributions of lasting importance—was characteristic of him. Yet to him the ceiling was not the skylight of the operating rooms in which he worked his miracles of dexterity and exercised his agile judgments based on clinical pathology—he ventured further into the fields of medicine, saw through the clouds, and reached into the stratosphere. Confronted with difficulty, his strong convictions and inexhaustible energy carried him over rough terrain, through narrow passages, and beyond obstacles impassable to those of lesser caliber and more circumscribed horizon.

George Crile's life span can no more be measured in units of calendar years than can the lives of others whose multitudinous interests and prodigious accomplishments have resulted in constant demands upon their time, thoughts, and energies.

Surely to no one more than to him could the dictum of Logan Pearsall Smith be applied:

"The... pursuit of an unattainable perfection... that is what alone gives meaning to our lives..."

IRVIN ABELL, M.D., Sc.D., LL.D., F.A.C.S. Chairman, Board of Regents, American College of Surgeons

GEORGE CRILE, internationally famous surgeon, preeminent in both scientific research and surgical technique, a great organizing genius in wartime and peacetime medicine, was, in the preliminary stages and through all the years since its founding, a prime mover in the affairs of the American College of Surgeons.

When we who live to carry on the work of the College pause to reflect upon the ready acceptance of its program which lightens our labors, we realize that to the profession and the public the organization reflects the sound ideas of men such as Dr. Crile. His lofty ideals and his vision for the shaping of a better surgical world can be perceived in its policies and accomplishments by all who know how large was his part in them. The College has achieved solidity and prestige through the support generously given by him and others of like unquestionable standing. In return, it provided, for them and for him, opportunities to expand their influence far beyond the limits possible to the individual working alone.

As many and important as are Dr. Crile's legacies to medical science, none exceeds in value that which he leaves to the organization which has his spirit built into every inch of its framework. That spirit will endure. Always it will be remembered that he devoted time, effort, thought, and fervor, in surpassing measure, to the development of the College, which is one of the reasons that it now numbers more than 13,000 Fellows and is the largest and doubtless the most influential body of its kind in the world.

Dr. Crile was one of twelve men appointed in 1912 by Dr. Edward Martin, President of the Clinical Congress of Surgeons of North America, to form a committee on organization of the American College of Surgeons. He was elected the second President of the College, serving during the stormy war years of 1916 and 1917.

Dr. Crile served as chairman of the Board of Regents until his resignation from that office on October 20, 1939. He missed only one meeting while he was a Regent, with the exception of those held during the time he was in World War I and afterward in Africa. When the time finally came at which he had carefully planned his retirement as chairman, the successor who was nominated and elected was of his selection, a fact which I take pride in acknowledging since the honored Regent was myself. The vacancy on the Board created by his resignation, which occurred two years before the expiration of his term, was also filled by a man of his choice, Dr. Evarts A. Graham of St. Louis. I cite these facts to show how, even when he was withdrawing from its active direction, he so planned the bringing in of new leaders in the College to assure himself that the policies for which he had striven would be continued. We who succeed him are of his mind concerning the upholding of the ideals of the founders.

The American College of Surgeons was founded in 1913, Dr. Crile being one of the founders and taking an active and prominent part in the organization of the College. His intense interest in the College is indicated by the many appointments he held on its committees and his active participation not only in their meetings but also in all of the general and special sectional meetings. He was a member of the Board of Regents from 1913 to 1941, resigning in that year before the expiration of the last term to which he was elected. He served continuously as Chairman of the Board from 1913 until October 1939, when he requested that his name be not considered for reelection.

He was a member of the Executive Committee from 1913 to 1941; member of the Finance Committee from 1925 to 1941; member of the original Board of Governors, on which Board he served from 1913 to 1917; member of the Cancer Committee from 1922 to 1943; member of the Committee on Permanent Home of the College from 1913 to 1920; Chairman of the Committee on the Hall of the Art and Science of Surgery from 1935 to 1943; member of the Committee on Medical Motion Pictures from 1926 to 1941; member of the Committee on Inter-American Relations from 1939 to 1943; member of Co-operating Committee with American College of Physicians from 1937 to 1943; member of Advisory Council, Board of Regents, October 1941 until

his death, the other members being Dr. Walter Chipman of Montreal, Dr. Rudolph Matas of New Orleans, and the late Dr. John M. T. Finney of Baltimore. He was a life member of the College by virtue of contribution to the Endowment Fund, the formation of which with a plan for its activation he proposed to the Regents at the 1914 meeting of the College in Philadelphia. The Endowment Fund as of December 1942 amounts to \$933,000, a monument to his foresight and vision.

Including the War Sessions that were held last Spring, the College has held 224 Sectional Meetings since the plan was inaugurated in 1920. These meetings were held in all parts of the United States and Canada and in the earlier years, 1920 to 1926, as many as thirty-five meetings were held in a given year. While Dr. Crile was Chairman of the Board of Regents he attended practically every one of these meetings, especially during the earlier years, giving freely and unselfishly of his time and effort in promoting the policies of the College. The last meeting which he attended was the War Session in Columbus, Ohio, March 13, 1942, when he spoke on the "Activities of the American College of Surgeons and Their Relation to the Defense Program."

Dr. Crile served as a member of the Consulting Editorial Board of Surgery, Gynecology & Obstetrics, the official Journal of the College, from 1920 to 1942, and he was an elected member of the Board of Directors of the Surgical Publishing Company from 1935 to 1942.

Over and over, in Dr. Franklin Martin's record of the founding and growth of the College, are references to conferences and consultations with Dr. Crile, and to inspiration and encouragement derived from his enthusiastic support. To him Dr. Martin devoted a special chapter in his autobiography, to express appreciation for the advantage of close association with a man he termed "one of the most interesting and fascinating characters in the medical profession—a man of unusual initiative, and an ardent researcher." He classified him as an individualist by nature, but with a balance and an intelligence that made him realize the importance of the practical and of the conventional. Dr. Martin did not fail to mention the loyal companion of George Crile in the happy years since 1900—Grace McBride Crile. He couples them in the closing sentence of his tribute with the words: "They are always an inspiration, and their enthusiasm never wanes."

When Dr. Martin, who had been Director General of the College, died in 1935, it was Dr. Crile who stepped into the breach and reorganized the conduct of affairs under an Administrative Board with Dr. Malcolm T. MacEachern and Dr. Bowman C. Crowell as Associate Directors, and the other members, Mrs. M. T. Farrow, Miss Eleanor K. Grimm, and Mr. A. D. Ballou. So interested was he in encouraging the successful assumption of responsibility by those who were actively heading the Hospital Standardization, clinical research, publications, Clinical Congress and other meetings, business, and other work, that during the early years of the new regime he went to Chicago almost every week to sit in at the Administrative Board meetings. It was always a matter of pride to him that with his help the College administrative personnel were able to carry on after Dr. Martin's death without the appointment of a new Director General.

Dr. Crile's interest in a new department of the College projected in 1935—the Hall of the Art and Science of Surgery—was expressed by the donation of an extensive exhibit practically duplicating that which is here in Cleveland, and which illustrates his theories of the intelligence, power, and personality of man and animals. This exhibit memorializes the work which Dr. Crile has done.

Insight into Dr. Crile's feeling toward the College is best obtained from his own expressions in talks and writings. Because they are so applicable to conditions today, I should like to quote a few sentences from his presidential address at the Sixth Convention of the College during the wartime Clinical Congress in 1917. Urging consecration of the Fellows of the College and the resources of the organization to the national cause, he said:

"Let the Fellows of this College give support to whatever the German Army is opposed to. Let it be to the everlasting honor of our Corps that every name on the Roll of Fellowship will be on the roll of duty somewhere in the far-flung battle lines, thus supporting the cause of humanity in this hour of peril... We, the American College of Surgeons, are a part—an important part—of both the foundation and the superstructure of civilization. We have it in our power to evolve an ideal hospital organization, to raise the standard of the 7,500 hospitals in the United States... We have it in our power to increase the output

of new and useful knowledge by our medical schools and hospitals; to develop a new generation of better surgeons, to bring this College more fully into national defense in peace as well as in war."

The enthusiasm that glows in those words was ever present in Dr. Crile's attitude toward the College. In his address at the dedication of the John B. Murphy Memorial in Chicago in 1926, he made an interesting forecast which shows how broad was his view of the potentialities of the work of the organization, when he said:

"We confidently believe that any report of the extent of interest and activities of the American College of Surgeons will soon become truly a Pan-American report. Increasing numbers of Latin-American surgeons are being included in the list of Fellows, and two official expeditions by officers of the College to South America have done much toward cementing a relationship which cannot fail to be of the utmost value not only to the surgeons of all the American countries but also to the public at large because of the increasing commercial and social relationships among these countries."

As to the primary purpose of the College, his views as expressed in the Annual Oration on Surgery at the San Francisco Clinical Congress in 1935, may be summed up in the following quotation:

"It should be borne in mind that we are building not in the interest of the profession but primarily in the interest of the people at large. The automobile, the airplane and other methods of transportation—the machinery of civilized man—is so distributed on the farms and ranches and in the mines, on the highways, on railways and in the air, that everybody is on the front line so that in the case of an accident, a disease, or a surgical operation it is as necessary to have a good surgeon in the most remote place as it is to have one in San Francisco, Los Angeles, Boston, New York, or Philadelphia. Therefore, our task is to see to it that there are good surgeons all over Canada and the United States; and wherever there is a human being who requires the service of a surgeon we must have a good surgeon and a good hospital."

A fourth quotation will suffice to suggest the source of much of the inspiration that has been behind the College programs. Dr. Crile, in 1930, writing on "What the Hospital Standardization Movement Means to the Present-Day Practice of Medicine," said:

"The Hospital Standardization Movement has had a wonderfully beneficial effect on the treatment of the patient, not only in the organization and functioning of the medical staff and other departments in the institution, but it has brought the hospital into a better scientific and human atmosphere, where the interests of the patient are always the primary consideration. Better organization, greater cooperation, better equipment, more efficient personnel and adequate supervision have been the means for more correct diagnoses and improved methods of treatment, all of which is most decidedly reflected in end-results today... The standardization of hospitals by the College is a great piece of work..."

That is a good tone on which to end this discourse on Dr. Crile—his own tone of approval, and commendation, and appreciation of work done. Without its constant sounding, the College would not be where it is today. That we acknowledge humbly and gratefully, proud that we have had these many years among our active leaders this man whose worthy life is universally acclaimed and whose death is internationally mourned. His great and lasting contribution to the American College of Surgeons is appreciated by those who carry on the torch, and it is their pledge that in the organization to which he gave so much, his purposeful, generous, unselfish spirit will never die.

He has obeyed in fullest measure the unwritten law that he who enjoys the prestige of a profession should leave the profession better than he found it. His attainments, his accomplishments, and his benefactions to his fellow-men will ever remain with us as a heritage and an inspiration, while the memory of his genial companionship, lovable character, and charming personality will abide with us as a benediction.

WINFRED GEORGE LEUTNER

Before we leave this service to go our several ways, I invite you to stand a moment in reverent silence in his honor. (Silence)

And so we enshrine him, George Crile, in our hearts and entrust him to Memory as she gently takes him "to her caverns pure and deep," whence his ideals and his influence will radiate to the succeeding generations.

BIOGRAPHICAL OUTLINE

Born in Chili, Ohio, November 11, 1864; son of Michael and Margaret (Dietz) Crile

Married Grace McBride of Cleveland, Ohio, 1900

Children: Margaret (Mrs. Hiram Garretson), Elizabeth (Mrs. J. A. Crisler, Jr.), George, Jr., Robert

Died in Cleveland, Ohio, January 7, 1943

Ohio Northern University, A.B., 1885; A.M., 1888

University of Wooster Medical Department (now Western Reserve University School of Medicine), M.D., 1887

Postgraduate courses in Vienna, London, Paris

University of Wooster, A.M., 1894; LL.D., 1916

Hiram College, Hon. Ph.D., 1901

University of Dublin, M. Ch., 1925

University of Glasgow, LL.D., 1928

University of Guatemala, Doctor Honoris Causa, 1939

Visiting Surgeon, Lakeside Hospital, 1911-1924

A Founder and Life Member, Cleveland Clinic Foundation (Trustee, 1921-1936; President, 1921-1940)

Chief of Surgical Staff, Cleveland Clinic, 1921-1940 (Head of Research Division, 1921-1943; Chief Consultant in Surgery, 1940-1943)

Lecturer and Demonstrator of Histology, University of Wooster, 1889-1890

Professor of Physiology, University of Wooster, 1890-1893

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- Professor of Principles and Practice of Surgery, University of Wooster, 1893-1900
- Professor of Clinical Surgery, Western Reserve University School of Medicine, 1900-1911
- Professor of Surgery, Western Reserve University School of Medicine, 1911-1924
- Emeritus Professor of Surgery, Western Reserve University School of Medicine, 1924-1943

FELLOWSHIPS

American College of Surgeons (A founder, member Board of Regents 1913-1941, second President, 1916-1917, member original Board of Governors 1913-1917, Chairman Board of Regents 1926-1939)

Association of Surgeons of Great Britain and Ireland, Honorary Fellow

Medico-Chirurgical Society, Bologna, Honorary Fellow

Philadelphia Academy of Surgery, Honorary Fellow

Royal Academy of Medicine, Belgium, Corresponding Member and Honorary Fellow

Royal Academy of Medicine, Ireland, Honorary Fellow

Royal Academy of Medicine, Rome, Honorary Fellow

Royal College of Surgeons of England, Honorary Fellow

Royal College of Surgeons of Ireland, Honorary Fellow

Royal Society of Medicine of London, Honorary Fellow

Southeastern Surgical Congress, Honorary Fellow

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MEMBERSHIPS

American Association for the Advancement of Science

American Association of Anatomists

American Association of Obstetricians, Gynecologists and Abdominal Surgeons

American Association for the Study of Goiter

American Board of Surgery, Founders' Group

American College of Surgeons

American Heart Association

American Medical Association

American Medical Editors' Association

American Philosophical Society

American Physiological Society

American Society of Clinical Surgery

American Surgical Association

Association of American Pathologists and Bacteriologists

Association for the Study of Internal Secretions

Cleveland Academy of Medicine

Cleveland Medical Library Association

Inter-State Postgraduate Medical Association of North America

National Academy of Sciences

National Institute of Social Sciences

National Research Council

Ohio State Medical Association

Society of Clinical Surgery

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Society of Experimental Biology and Medicine

Southern Medical Association

Southern Surgical Association

Alpha Kappa Kappa, Medical Fraternity

Alpha Omega Alpha, Honorary Medical Fraternity

Chicago Surgical Society, Honorary Member

Colorado State Medical Society, Honorary Member

Los Angeles Surgical Society, Honorary Member

Medical Society of New Jersey, Honorary Member

Medical Veterans of the World War

National Social Science Honor Society of Pi Gamma Mu

Tacoma Surgical Club

Western Surgical Society, Honorary Member

International Society of Surgeons

Medico-Chirurgical Society, Edinburgh, Corresponding Member

Association de Société Chirurgie, Paris, Honorary Member

College of Madrid, Corresponding Doctor

Société Internationale de Chirurgie, Bruxelles, Honorary Member

Czechoslovakian Medical Society, Prague

Sociedad Peruana de Cirugia, Honorary Member

Sociedad Nacional de Cirugia, Habana, Foreign Corresponding Member

Gorgas Memorial Institute of Tropical and Preventive Medicine

Sociedad Argentina de Cirujanos, Corresponding Member

And other organizations and societies

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AWARDS

Cartwright prize, Columbia University

Senn prize, American Medical Association

Alvarenga prize, College of Physicians of Philadelphia

American Medicine medal for service to humanity

National Institute of Social Sciences medal

Distinguished Service Medal (United States)

Trimble lecture medal

3rd Laureate of Lannelongue Foundation (Medal of Surgery) Société
Internationale de Chirurgie de Paris

Cleveland medal for public service, Cleveland Chamber of Commerce

Distinguished Service Gold Key, American Congress of Physical Therapy

Medal presented by Inter-State Postgraduate Medical Association of North America

MILITARY SERVICE

Brigade Surgeon of Volunteers, Major, Cuba and Puerto Rico, 1898

Major, Medical Officers' Reserve Corps, and Professional Director, U.S.A. Base Hospital No. 4, Lakeside Unit (B.E.F., No. 9), in service in France, 1917-1918

Senior Consultant in Surgical Research, A.E.F., 1918-1919

Lieutenant Colonel, Medical Officers' Reserve Corps, 1918, Colonel, 1918, Brigadier General, 1921

Honorary Member, Military Division, 3rd Class (Companion Order of Bath, British), 1919

Chevalier Legion of Honor (French), 1922

Honorary Consultant of the Medical Department of the Navy of the United States, 1941

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