In the year 1842 an unknown genius walked down the gangplank of a river steamboat as it landed at Pittsburgh. His measured and energetic stride carried him up the busy wharf, past and beyond the gaze of curious bystanders. A man of local prominence named George W. Jackson was soon to identify him as a person out of the ordinary. There was something unusual in his confident bearing, his curt friendliness, his clipped German accent, his bold assurance. Who was this newcomer? Albert G. Walter, a gifted physician, poor in worldly goods but rich in knowledge and destined to become foremost among pioneer surgeons. A creative master years ahead of his time, he would be among the first to correct vicious and crippling deformities, perform life-saving operations for cancer, correct unsightly harelips and cleft palates and perform epic-making operations for ruptured bladder.

Endowed with the strongest of convictions and a tremendous thirst for learning, he was a man of rare courage and resourcefulness and capacity for work, and deeply devoted to his patients and those he loved; yet also a man of furious intolerance, egotistical and impatient, arrogant and quarrelsome, he would be constantly embroiled in disputes both wordy and otherwise. This man would be a stormy petrel in his professional group, looked upon with both admiration and hatred, while the laity would view him with both affection and fear. From the man Jackson, rather well-to-do, he would soon receive aid in opening an office and enough money to buy a horse. Aside from being his benefactor he was also to become one of the few staunch friends Walter would ever have.

Dr. Walter was born in Germany on June 21, 1811. Nothing
is known of his family. Left an orphan at the age of four he was raised by a friendly and affluent guardian who gave him the advantages of a good preliminary education, much of his youth being spent in the best of boarding schools. This was followed by a thorough classical education in a German university. His deeply religious guardian insisted he enter the ministry, but here Walter's stubbornness came to the fore and because of ensuing differences of opinion, all further financial aid was denied him. He was now on his own.

His medical course at Koenigsburg was accomplished by extra work in the laboratory, dissecting dogs and other vertebrates, mounting skeletons and in general acquiring an intimate knowledge of anatomy. On graduation he spent another year at the University of Berlin where he received great inspiration from the celebrated Professor Dieffenbach, one of the greatest teachers of the day, and to whom Walter became an assistant. Here he learned a newly discovered technique for treating contracture deformities, by subcutaneous division of tendons and muscles. It was on the advice of this noted surgeon that Walter sailed for America, where he hoped to introduce this new and revolutionary treatment. America, land of opportunity, where all things were progressive.

Embarking from a Baltic port, his sailing vessel encountered a violent storm in the Skagerrack. Floundering helplessly in the gale, his craft was shipwrecked and broken up on the coast of Norway. Although a strong swimmer, he barely escaped drowning. He lost all his belongings but was glad enough to find himself one of the few fortunate survivors. Working as a deck hand on a lumber schooner, he later managed to reach London. Penniless and destitute, he finally found work as a cab driver and worked for a time as a copy clerk in a law office. Being a man of fierce pride, he was much ashamed of this employment and for many years concealed this fact from his family.

While in London, he managed to enroll at the Royal College of Surgeons and through the year of 1837 he attended the lectures of Sir Astley Cooper, receiving his diploma about the time he had saved enough money to bring him across the Atlantic. It is well to note that Walter was thus thoroughly grounded and prepared for a notable career, having received training from the most celebrated surgeons of that day in Germany and England, respectively. He was proud indeed of his letters of introduction from these men which,
along with his various diplomas, graced the walls of his office until his death in 1876.

Things went badly for him in New York, where he found hostility and unfriendliness and was told they "had no room for a Dutchman," as he stated later. He was forced to work as a common laborer to earn any money at all. It seems incongruous that this would be the case in Dutch Manhattan. One can surmise that it might have been his unfortunate personality and his inability to get along with people. Especially so, since he met with similar trouble in Philadelphia. He next came to Pittsburgh and took a boat down the Ohio, not knowing what destiny had in store. But wait! This man was a visionary and growing bitterness never dissuaded him from his ultimate aim. His money gone, he was put ashore at Nashville, Tennessee, where he remained through 1840 and 1841.

New and unexpected vistas were now to open up for him. He was to have his first and longed-for opportunity to delve into his chosen field of endeavor, the work for which he was so richly trained. True, he had a difficult time making a living but a psychic income was in store for him when plantation owners permitted him to operate on afflicted slaves. His keen desire was the correction of deformities and through this golden opportunity he gained wide and practical experience which would make him one of the first in America to correct clubfoot and perform other difficult types of orthopedic surgery. Elsewhere consent for needed surgery was hard to obtain and the paying citizenry shunned him, in spite of his glowing results. In this work his remuneration was usually in provisions rather than currency, which obviously kept him from starvation. He was deeply touched by the evils of slavery and the hard lot of some of them won his entire sympathy.

It is entirely probable that the following incident had much to do with his return to Pittsburgh in 1842. A plantation owner once sent him a ham and a sack of dried apples for saving the mangled leg of one of his favorite slaves. Some time later he happened along to find the master in the act of whipping this slave. Seizing him with such violence as to break his arm, Walter threw him to the ground, grabbed the whip and thrashed him unmercifully. Losing all compassion for the man he had injured, he refused to "set" the broken arm and when the owner's son threatened to shoot him, he wisely decamped from the scene. Happenings of this character
no doubt helped to make him the rabid abolitionist he was known to be. These and perhaps other troubles seem to have led to his decision to pull up stakes and try it elsewhere.

Once established in Pittsburgh his career came into its own and his practice began to bloom and flourish. The mills and factories were always having "machinery accidents." His first fee was five dollars, received for giving an anaesthetic for a mill surgeon who performed what Walter considered an unnecessary amputation. He spent the money for a box of the blackest cigars he could find and, puffing away at one of them, boldly confronted the company officials with a bitter harangue about the surgical neglect of their injury cases. That this damaged his professional standing did not bother him in the least. They were soon to learn of his results in fracture cases and his general superiority to others. In short, his egotism and self-assurance were backed up by unheard-of success, so that his fame as an industrial surgeon soon became nation wide. The hardships he had endured had now hit the jackpot of ambition.

His naturalization papers show he renounced his allegiance to the King of Prussia in 1844. He became thoroughly Americanized and always kept his case histories in English. He was ever anxious to avoid the German sentence construction in the writing of case notes and scientific papers. His intelligent and devoted wife (daughter of Major John Butler of the local United States Arsenal) frequently proof-read them in order that any such grammatical errors might be detected. "Besides," as he expressed it, "it takes more words to say it in German." Mrs. Walter worked with her husband tirelessly, kept his books and records, worked with him far into the night, cutting heavy strips of leather to be softened in water and used as form splints (bound to a limb and becoming a firm support after drying out), and often had a pot of hot coffee for the patient after the operation was completed. Nourishing food would be ready after Walter had worked late hours, hammering out orthopedic appliances with his tinsmith or making instruments, hand forged under his direct supervision. Surely a man of great industry!

Walter had the greatest solicitude for his family and for all children. Someone might admonish street urchins with a "Here comes Walter! Run! He'll cut your legs off!"; nevertheless on a warm summer night one might see him sitting on the river bank surrounded by a group of children, absorbed in juvenile tales of the celestial bodies and the orbits of stars and planets. Not only was
he a great student of astronomy but an ardent naturalist. Here again his attachment to little children might be observed, for one might discover him bending over an ant hill with a large hand lens, showing his small friends things of interest in the insect world. His own children were kept out of public schools. These were inferior institutions of learning. They must have private tutors and only the best. Walter was not a church goer nor was he irreligious but had a stern belief in God and saw to it that his children had church upbringing.

He was fond of all animals, pigeons, guinea pigs, goats and dogs. He had a pet squirrel he had trained to travel from one coat pocket up over his shoulders and down to the other. Lumps of sugar were carried in his pocket, to give to horses hitched along the street. He kept two of his own and when out on sick calls he was certain to use them alternately on each round. It was this instinct for kindness to dumb animals that led him to found the Pittsburgh Humane Society and to remark that he was "ever ready to serve this good cause with all my heart."

Although his time and energy were devoted primarily to the humanitarian aspects of life, he nevertheless managed his finances with typical German thrift and in later years became comfortably well off. He was one of the first investors in the wooden toll bridges which spanned the Monongahela and Allegheny Rivers at Smithfield and at Ninth Streets and one of the earliest stockholders in the Duquesne and Monongahela Inclined Planes. Oddly enough these inclines are still in operation today, carrying passengers and vehicles up the rugged face of Mount Washington on Pittsburgh's South Side and still paying dividends, to his great-grandchildren.

Walter's driving zeal in the furtherance of good surgery, his mania for work and the care of his patients, his constant striving for improved methods and the numerous scrapes he kept getting into, all combined to give him little time for recreation. He was a man of many talents, not the least of which was his ability to sketch and paint. After 1860 his spare time was taken up in writing textbooks and articles for medical journals. Prior to that time he had his interesting cases pose for him, while he made water color drawings capturing the patient and his pathologic lesions in almost photographic likeness. They were masterpieces of art, showing the tissue structures with great accuracy of shade and tone coloring, perhaps revealing a cachectic appearance in a patient with cancer,
George Oberle, Bavarian, 51 years old, Allegheny city Pa.
from Aschaffenbug.

Cancer scirrhous subcutaneous of 9 years' standing. Extirpation & cautery

August 28, 1856.

Began as a black tumor in skin near the nose, which became red. Had been extirpated 8
months ago uneffectually.
or a facial expression of pain or distress. His skill as an artist was amazing indeed.

He was fond of the drama, Shakespeare in particular, and enjoyed concerts, especially the works of Richard Wagner. While bustling about his office he might be heard humming the Preislied from *Die Meistersinger* or Sigmund's Love Song. With the advent of the Centennial Exhibition in Philadelphia and the high publicity it received, he was finally coaxed and cajoled into attending, with the pretext it would also give him opportunity to visit and collaborate with his friend and co-worker, the famous Dr. S. Wier Mitchell, a Philadelphia resident. He never forgave himself for leaving his work to attend, for on this visit he contracted a severe cold. On his return home he was summoned at once to the bedside of a patient requiring immediate surgery and with whom he remained throughout the day and night without rest or sleep. He later remarked that he had been offered no food or even a cup of coffee. (That he did not demand it is quite unlike him.) Lowered resistance and the bitter weather he encountered on the trip home-ward led to the pneumonia from which he died (1876).

Outside his immediate family Walter was irritable and quick tempered. He was usually revered by his patients, to whom he was the essence of kindliness, but a veritable tyrant with the patient's family, thus making sure every detail of the nursing care would be carried out. He would tackle anything of a surgical nature and would operate any place, be it the kitchen, the back porch or even in the yard. Nervous housewives were known to erect screens to protect the operative setting from the gaze of derisive passers-by, or insist on stopping the operation long enough to move into the house for its completion. He had a new technique for strabismus (cross-eye) and on seeing such a case, or a hopeless cripple or a cancerous jaw, he was at once obsessed with a consuming passion to wield the knife and would go to any extreme to get the afflicted one into his office. On one occasion he actually paid a farmer for the privilege of operating on his clubfoot, exacting the promise that if successful, he be allowed to correct the similar defect in the other foot.

He was totally unforgiving of any criticism of himself or of his work, especially on the part of other doctors. He had no particular quarrel with internists but he couldn't tolerate professional ignorance on the part of his surgical compatriots and held them in open contempt. To him they were *nichtskennen*. When called to
see a patient previously treated by another doctor he not uncom-
monly remarked, "What shoemaker has been working on you?"
He wouldn’t hesitate to stop people on the street and advise mal-
practice suits against doctors who had treated them, and would even
testify in their behalf. This conduct brought him a bounty of bitter-
ness and he exploded in anger when he found himself the defendant
in similar court actions. On one occasion an emergency case was
brought up the river on a steamboat, accompanied by a physician
who had applied a tourniquet to control bleeding. Amputation was
advised. Walter stepped into the picture with a sharp "Nonsense.
I will save the man’s limb.” The next day the man was dead and
the case was soon in the newspapers. The other doctors pounced
on him in a hurry and he soon had a lawsuit on his hands. On
another occasion Dr. Walter showed a semblance of charity toward
another defendant surgeon. Called as an expert witness, he testi-
fied the doctor had given the proper treatment. When asked by the
prosecutor, "Is that the way you would have treated the patient?"
he answered, "No. That is the accepted treatment today. But I
have a better way.” His fellow physician won his case. He once
treated a tuberculous knee joint by implanting peas in the overlying
soft tissues, a not uncommon procedure in that day. He hoped they
would germinate and effect a cure. The treatment failed and the
patient entered suit. This gave his colleagues a chance to retaliate
and they were overjoyed at the prospect of testifying against him.
He lost.

In 1913, when I acquired Dr. Walter’s color drawings and
case histories and was at once bent on learning more of the man’s
personal side, I contacted a number of elderly physicians who re-
membered him in their youth. Many were the interesting episodes
they related. All were astounded at the surgery he performed and
none failed to comment on his unpredictable personality. His was
a character of chameleon coloring, a Jekyll and Hyde in the truest
sense. One day an angered physician whom Walter had criticized
came stomping into his office to demand an apology. He had just
finished a delicate eye operation for cataract. Lapsing into heated
German vernacular he flew into a rage and went for the intruder
with a tinner’s mallet. Had other doctors there to witness the
operation not intervened, he might well have finished him off. It
was also related that on another occasion an irate physician stalked
in on a similar mission. Walter was about to strike him with a
large paper weight but when warned if he did so he would be a
dead man, he hesitated a moment, laid it aside and grudgingly
apologized. His quick temper flared easily. He was never known
to quarrel with a German, admired the English but had a strong
antipathy for the Irish. In fact he was once arrested for engaging
in a brawl with an Irish puddler up in the hill district (now Grant
Street and only a square from Pittsburgh's downtown Golden
Triangle). The man and his friends had mocked his German accent
and in the encounter which followed they threatened to lynch him.

He opened his own private hospital and exploited it by the cir-
culation of elaborately printed cards, advertising in such a manner
that if done today would stamp him as a quack and a charlatan.
Here one notes not only his disregard for ethics but a brazen con-
tempt for the opinion and good will of his fellow practitioners.

Walter's glib remarks and quips were still remembered by his
descendants, handed down by preceding generations. He was much
chagrined by a sick Irishman down with typhoid. The patient asked
for some salt water pickles. "No," he said sharply, "it will kill
you." "That's funny," was the answer, "I ate some yesterday and
here I am." The patient got well. He was once called to a
monastery to attend a sick monk for pneumonia. The monk in-
sisted he just "had" to get out of bed to attend early morning prayers.
His incisive reply was quite to the point and characteristic, "If you
do, God will have to take care of you, it won't be me!" The monk
obeyed, also recovered. A circus came to town. A trapeze per-
former who fell and broke his leg was taken to Walter for treat-
ment. He got his usual good result but the circus went broke and
couldn't pay his bill. The sheriff took over and in lieu of his fee
the doctor was given the circus elephant. Walter didn't mind this
too much because he liked animals, anyway. He kept it for a time
but found it an expensive luxury. How it was disposed of I have
not been able to learn.

His great humanitarianism is apparent in many ways. The
groom who looked after his horses went insane. A harmless type
of derangement, his chief delusion, no doubt fostered by his em-
ployer's penchant for cleanliness, being an urge to repeated and
persistent washing of imaginary mud from the doctor's buggy. Yet
Walter treated him with utmost kindness and was careful to see
that he came to no harm.

He was particularly considerate of the wounded veterans re-
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FOR THE RECEPTION OF PERSONS AFFLICTED WITH
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Such as Club Feet, Contraction of the Joints and Curvature of the Spine, whether congenital or acquired, and Wry Neck. Also,
DISEASES OF THE EYE,
INCLUDING
CATARACT OR BLINDNESS,
AND ALL DISEASES
REQUIRING SURGICAL TREATMENT,
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Office hours, from 2 to 3 o'clock, P. M.
turning from the Civil War and labored devotedly for their comfort and care. He was bitterly opposed to slavery and solidly behind the Union cause. Long before the cannonading had ceased in the Battle of Gettysburg, I quote from an old book of that day, *Under the Maltese Cross*, “Dr. Walter and a staff of twenty-two nurses, hospital stewards and members of the Christian Commission arrived at the front with instruments, medicines, lint and other needed supplies. The wounded were gladdened by the arrival of this surgeon of national reputation and by the unremitting zeal with which he labored under the murderous shell fire at Little Round Top and later among those bivouacked in the town. His cordial sympathy for the pain and suffering of those gallant soldiers endeared him greatly in their hearts and memories.” At the war’s end, my father opened a harness and saddlery shop on Smithfield Street near Walter’s office. Here he watched the doctor dig out a fragment of canister shell from the lung of a returned veteran and amputate a gangrenous leg in another, recently freed from Andersonville Prison.

Walter’s driving energy kept pace with his great attention to detail. His case histories were accurately and studiously prepared. In addition to the name, age and occupation, previous residences were shown, such as County Mayo or County Donegal, Ireland, or Native of Birmingham, England, or Memlingen, Aschaffenburg or Klein Schwalbach, Germany, “now of Pittsburgh, Pa.” The cause of the malady was made note of, such as “the kick of a horse,” “stung by a locust,” “struck by a clever,” “crushed by slate in a coal pit,” “kicked during a fight,” or “fell through a hatchway while intoxicated.” He entertained the irritation theory as the cause of cancer. Such as “the rub of a corset board” or “pricked by a darning needle.” In that early time, birthmarks and other congenital defects were attributed to prenatal influence. That Walter also held the belief is shown by his records that a certain case of harelip was “caused by a cat jumping on the mother’s shoulder when six months gravida.” Patients were variously described as being of a consumptive, bilious, hepatic or sanguino-hepatic constitution and his diagnoses were always given in Latin, such as *Resectio maxillae Superioris for Sarcoma Medullare Scrofulorum*. His tremendous intolerance for professional ignorance in other surgeons is often made note of in his case reports. It is not uncommon to find a sarcastic comment on the gross mismanagement of a patient formerly or recently treated by Dr. So-and-So.
His drug therapy was not too antiquated at that. Potassium hydriodide and the biniodide of mercury were ad-ministered in copious amounts, Fowler's Solution was used both internally and as a local dressing and alum, silver nitrate and ferro candida were his local cauterizing agents. Infected wounds were sometimes treated with ammonium muriate in alcohol. The advent of chloroform and ether as anaesthetics proved a great boon to him. Previously he resorted to enormous doses of morphine and even after the operation, he kept the patient virtually stupefied by full grain doses at two-hour intervals, thereby assuring certain relief from pain.

He was widely known for his treatment of ununited fractures and for re-section of diseased bone-ends, often creating artificial joints that restored normal motion. He had great success in correcting congenital torticollis (wry neck) and was a pioneer in the use of the silver bone plate. Superficial tumors were removed by Ecraseur (crusher), an instrument used for crushing the mass and ultimately separating it by means of constricting cords or chains. Bowed legs were treated by splinting and pressure and dislocations were reduced by ropes and pulleys. He is recognized as the first anywhere to operate for ruptured bladder. The peritoneum was left unsutured (there was some current and unexplained prejudice against it) and in those pre-catgut days the incisions were closed with iron or silver wire.

He was a prolific writer. His numerous articles appeared in the best current medical journals of the day in both Europe and America, such as The Medical and Surgical Reporter, The American Journal of Medical Science, The British Medical Journal and The Archives of Clinical Surgery. He also wrote two text books, Fracture of Bones and Conservative Surgery. He filed and preserved every article he ever wrote, just as he saved every brace and appliance he ever devised. More than seven hundred of these were presented by his widow to the Medical School of the University of Pittsburgh, founded ten years after his death and which became a part of the Albert G. Walter Museum.

Being immaculately clean about his person, he dressed his wounds with this same attention to cleanliness. "Blood poisoning" was his greatest dread. It must be remembered that the germ theory was not yet fully established. That he was getting clean surgery and few postoperative infections without actually realizing why, might well be explained by two things. First, ammoniated
mercury was rubbed into the skin before the incision was made. Secondly, it was his habit to work late the night before an operation, scrupulously cleaning his instruments with a hand lens and carbolic acid and storing them in clean cotton. Thus they were pretty well sterilized.

He followed with great interest the work of Pasteur and the theory of micro-organisms as the possible cause of infection and, while a great admirer of James Syme and of Lord Lister of Glasgow, he scouts the latter's practice of spraying the operating room with phenol (carbolic acid) to rid the air of these so-called microbes. He was a firm believer in sunshine and fresh air and he thought it inadvisable to add more impurities to it. He expounds his views on the subject in his text book, Conservative Surgery. "Poison mingled with the air, then, and not pure air, is the enemy the surgeon has to contend with ——."

The book devotes much space to establishing his claim to the know-how of surgery and the case histories offered to prove his points are colored with dogmatic self-esteem. He finally concludes, "If saving the life or limb of the humblest citizen, by unusual effort deserves commendation, —— my success certainly stands unrivaled. That I have succeeded cannot in candor be denied me." And finally, "That my humble, laborious and protracted exertions, devoted to a noble cause should have provoked aspersions and detractions in special quarters—is not to be wondered at. But by having succeeded in my efforts, with the results laid open to professional scrutiny, I can well afford to be charitable to those of the profession, who, unwilling to investigate, seek renown only in mutilation and destruction. With such I hold no communion. To intelligent surgeons alone, I offer these pages and invoke them as judges of the merit, as rational as it is successful."

Thus ends the story of a great and unusual man, a man among men, a man whose memory we do well to honor in this our city's bicentennial year, a man whose faults and achievements can only be described in superlatives. If it is true that all geniuses have odd quirks of personality, then Dr. Walter conforms to the type. One wonders what this man would accomplish were he living in the current age. Would he still be years ahead of his time? I dare say.