Chapter 9

THE FOURTH QUARTER-CENTURY

THE SEVENTY-SIXTH ANNUAL MEETING

The seventy-sixth annual meeting was held at The Homestead, November 4–6, 1963, under the presidency of Chester Keefer[1] (Fig. 27). The President's Address, about the failure of the potato crop in Ireland in the 1840s, came up with the astounding implication that our then-Chief Executive of the United States, John Kennedy, might have been born and perhaps have remained in Ireland had it not been for the soggy

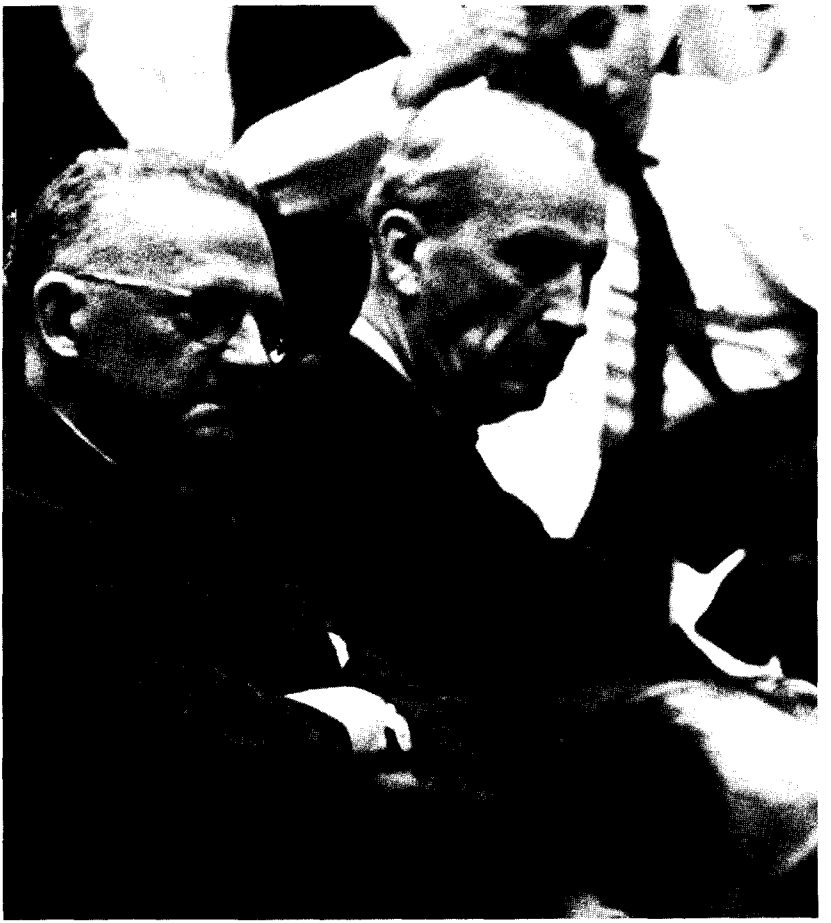

FIG. 27. Left to right: Chester Keefer, Lewis B. Flinn

environment, which fostered the growth of a potato fungus. The Gordon Wilson Lecture was delivered by Albert H. Coons, who gave an excellent summary of his own contributions and the current knowledge of the theories of antibody formation. J.J. Kilpatrick, editor of the *Richmond News-Leader*, gave a provocative talk after dinner on Tuesday, emphasizing the need for better lines of communication between physicians and their lay friends and the public in general.

Joseph H. Holmes presented an excellent memorial to James Johnston Waring,[2] who died unexpectedly on June 2, 1962. Born in Savannah, Georgia in 1883, Waring attended Yale University and began the study of medicine at Johns Hopkins in 1904. While a student, he contracted tuberculosis and moved to Colorado. When his condition improved, he returned to the study of medicine and was graduated from the University of Colorado School of Medicine in 1913. He interned at St. Luke's Hospital and took a residency at Phipps Sanitorium, both in Denver. In 1933, he became professor of medicine and the first full-time head of the department of medicine at the University of Colorado, serving until 1948. He was president of the American Climatological in 1941. Waring received the Gold-Headed Cane Award from the University of California in 1945, in 1949 the Alfred Stengel Memorial Award of the American College of Physicians, and in 1953 the Trudeau Medal awarded by the National Tuberculosis Association. After retirement as chairman of the department of medicine, he became head of the Webb Institute for Medical Research (later named the Webb-Waring Institute), having been elected president in 1948 after the death of Dr. Gerald B. Webb. The Institute was moved from Colorado Springs to Denver, and Waring raised the funds for erection of the Webb Building on the University of Colorado Medical Center campus.

There were many excellent papers at this 1963 meeting. Wesley W. Spink discussed the host-parasite relationship in human brucellosis. "Schmidt's Syndrome" was the subject of a review by Ivan Bennett, A. McGehee Harvey and several collaborators, including Charles C.J. Carpenter, in which an added component was found to be co-existent with the original thyroid and adrenal insufficiency reported by Schmidt, notably diabetes mellitus. In recent years this syndrome has come to be known as Carpenter's syndrome. William Bean and his co-workers discussed their "Experiments in Human Deficiency: The Effects of Combined Pantothenic Acid and Pyridoxine Deficiencies on Human Body Response." Lewis Dexter described his "Quantitative Studies of Pulmonary Embolism," work performed with George J. Smith. Austin Brues, Douglas Grahn and Harry Auerbach presented "Some Problems in the Study of Radiation Epidemiology." Joseph H. Holmes and his collaborators brought the group up to date on the "Present Status of Ultrasonic

Medical Diagnostic Techniques." He was one of the pioneer clinical investigators in this field.

THE SEVENTY-SEVENTH ANNUAL MEETING

The seventy-seventh annual meeting was held at the Broadmoor Hotel in Colorado Springs, October 19–21, 1964, with Charles W. Wainwright (see Fig. 33) of Baltimore in the chair. The weather was clear, crisp and sunny and the scene quite inspiring, with the far-reaching, brown, dry plains on the one hand and the backdrop of towering, dark, wooded mountains on the other. Canadian geese and mallards flew in clipped, precise formation over the lake. At a time when gold had long ceased to be a means of barter, and silver supplies were rapidly dwindling, we were a mile above sea level, only a day's wagon ride from the fabled gold and silver mines of Leadville and Cripple Creek where Mollie Kathleen was immortalized.[3] The President's Address was a carefully organized exposition of the hereditary complexity of medical symbolism related to the caduceus of Mercury and the staff of Aesculapius. The origin of the schizophrenic use of these two symbols by the medical profession was clearly explained. Dr. Joseph F. Ross, chairman of the department of biophysics and nuclear medicine at the University of Southern California, delivered the Gordon Wilson Lecture, an authoritative distillation of a tremendous amount of data regarding radioactive fallout and its effect on life.

An important highlight of the meeting was the first Jeremiah Metzger Lecture[4] by John Eager Howard, who told in an exciting way his carefully documented thoughts regarding the formation of urinary calculi. Other highlights of the meeting included an address about historical memorabilia of Colorado by Robert L. Stearns, president of the Webb-Waring Institute; trips to the Air Force Academy, and its astounding Chapel, to Pike's Peak, and in the Golden Bee, where Dr. Rackemann played the piano and led everyone in singing.

The scientific program was an example of the rapidly growing breadth of the investigative work performed by the various members of the Climatological. As most of the papers have a direct relationship to clinical medicine, these programs have continued to attract increasing interest and the society is progressively becoming one of the major places where scientifically oriented clinical investigation is presented. Irving S. Wright and Donald Cameron gave a very briskly discussed paper on "The Subclavian Steal and Other Shoulder Girdle Syndromes." W.C. Thomas, Jr. and his collaborators described "Hyperventilation Tetany Associated with Anxiety," providing evidence that certain anxious, tetany-prone, normocalcemic individuals constitute a biochemically distinct group in whom hyperventilation-induced tetany occurs at higher P_{CO_2} values than

in normal subjects. They found that guanethidine reduces the susceptibility to tetany induced by hyperventilation or hypocalcemia, and their observations suggested that catecholamines contribute materially to the excitability of nervous tissue *in vivo*. A new approach to stress tests with an ingenious type of electrode and its applications to the diagnosis of myocardial ischemia was presented by Robert E. Mason and Ivan Likar. Dr. Richard S. Ross (Fig. 28) and his colleagues reported on their studies of "The Effect of Nitroglycerin on the Coronary Circulation Studied by Cineangiography and ^{133}Xenon Myocardial Blood Flow Measurements." David E. Rogers and his co-workers presented their excellent "Studies on Experimental Bacteremia and Reticuloendothelial Function." Harvey C. Knowles, Jr. discussed the very important subject of the relation of the control of diabetes to the development of vascular disease.

THE SEVENTY-EIGHTH ANNUAL MEETING

The seventy-eighth annual meeting was held at Williamsburg, Virginia, October 25–27, 1965, under President Francis Lukens.[5] The Williamsburg

FIG. 28. Dick and Boo Ross, Colorado Springs, 1964.

meetings, because of the opportunity to learn so much about the early history of our country, attracted a large portion of the Climatological membership—a larger proportion than most other locations. There were 101 active, 35 emeritus members, and 123 wives present. The presidential address dealt with the development and use of artificial climates in medicine, a fresh and appropriate facet of the area of medicine that gave the Association its name. The Gordon Wilson Lecture was delivered by Alfred Gellhorn, who gave a clear exposition of the cancer problem and a very provocative work plan for future activity in the field of cellular structure and potentially controlled modification. Grant Liddle gave the second Metzger Lecture, a beautifully presented discussion of his work on cyclic steroid secretion. On Monday evening, Perry Culver spoke of his experiences related to joint Iranian and American medical education projects.

A walkie-talkie tour of Williamsburg was enjoyed by all. The glory of early American life was exemplified by Carter's Grove on the James River. The presence of Lady Edith Whitby, wife of Sir Lionel Whitby, was a pleasure, as many members of the Association knew them and were great admirers of their tireless work organizing blood availability in England during the Second World War.

At the Council meeting, a proposal was made through Roger Mitchell and other friends of Dr. Waring that a Waring Lecture be established. This recommendation was tabled for further investigation. The secretary was instructed to poll the members regarding their opinions about admitting properly qualified women as members—apparently the first time that subject had come before the Council for deliberation.

At the scientific sessions, Belton A. Burroughs discussed the new techniques available for clinical measurement of body radioactivity. Richard S. Ross and his colleagues described the "Isometric Contraction in Late Systole: A New Explanation for the Intraventricular Pressure Differences in Idiopathic Hypertrophic Subaortic Stenosis." Thomas B. Connor and his associates presented cases of "Intermittent Hyperparathyroidism," while Frank P. Brooks and his co-workers discussed "The Variable Clinical Course of Adult Celiac Disease."

THE SEVENTY-NINTH ANNUAL MEETING

The seventy-ninth annual meeting was held under the presidency of Cecil Watson[6] (Fig. 29) at Ponte Vedra, October 30–November 1, 1966. The weather was both pleasant and invigorating, and it was the unanimous opinion that Ponte Vedra was a wonderful place to hold the meeting and should be revisited. President Watson gave an intimate presentation of the life and activities of the hardy Voyageurs as they struggled through their daily life, trapping, exploring, surprisingly healthy and surviving in

FIG. 29. Far left: Cecil Watson; far right: Mrs. Hugh Butt. (Courtesy of Dr. Theodore Woodward)

spite of ancient medical ministrations. The choice of Ted Astwood was a happy one as the Gordon Wilson lecturer; he gave an important presentation on the current knowledge of the growth hormone. The third Metzger Lecture was delivered by John Merrill, who presented an eminently practical talk on the support of the patient with the chronically failing kidney, pointing out that such support is frequently more rewarding than having to resort to use of the artificial substitute. No one will ever forget Roger Egeberg's quiet, modest reminiscences of General MacArthur. The vitality of the Climatological was again characterized by Francis Rackemann. His enthusiasm and loyalty stimulated every member. At this, the 38th meeting which he had attended without a miss, he plunged through the ocean waves with a youthfulness envied by all.

One of the impressive things about researching the careers of members of the Climatological is uncovering their little-known contributions. Charles Nash Meader[7] died of pneumonia on August 4, 1965, at the age of 80. Migrating to Denver in 1912, two years after graduation from Harvard, he became identified with the newly-established medical school of the University of Colorado. Soon his energy and enthusiasm for teaching brought him to the attention of older physicians in the school, and in 1916 he was appointed dean and professor of medicine at Boulder and Denver. He had a keen insight into the future possibilities of the school. In 1916, when it seemed hopeless to think of maintaining operations even as they then existed, Meader proposed to expand the school

with new construction at a cost of over $2 million. With the support of President George Norlin and the Board of Regents, Meader obtained $800,000 from the Rockefeller Foundation, and $242,000 from other foundations; the state legislature appropriated $960,000; and local gifts, particularly that of Mrs. Verner Z. Reed, provided another $300,000, bringing the total capital raised to $2,300,000. Fred G. Bonfils of the *Denver Post* donated 17 acres of land for the building site. The Carnegie Corporation provided an emergency fund to keep the school in operation until the new plans matured. The basic idea was to combine all four years of the school and erect new buildings on a site large enough for future expansion. The new institution was to provide adequate teaching facilities for 200 students plus a 150-bed general hospital, an 80-bed psychopathic hospital, a home to accommodate 80 nurses, and all of the utility requirements.

Construction began in 1922 and was completed in 1924. Its planning had been largely the work of Meader. Unfortunately, because of ill health, he soon withdrew from clinical activities and in 1925 resigned as dean. Meader was elected to the Climatological in 1917 and served as vice-president in 1931.

As usual, the meeting featured an outstanding group of scientific papers, including: "Splenic Pooling and the Pathophysiology of Hypersplenism," by James Jandl and Richard H. Aster; "Ballistocardiograms and Ischaemic Heart Disease: A Nine Year Follow Up," by Benjamin M. Baker, Robert E. Mason, and their colleagues; "Appraisal of Typhoid Vaccine in Experimentally Infected Human Subjects," by Richard B. Hornick and Theodore E. Woodward; "Cardiac and Pulmonary Fibrosis during Methysergide Therapy for Headache," by John R. Graham; "The Pathogenesis of Varicose Veins," by J. Edwin Wood III and Robert C. Wheeler; and "Factors Influencing Host Resistance to Salmonella Infection," by Edward W. Hook and his co-workers.

The Eightieth Annual Meeting

The eightieth annual meeting was held at The Homestead in Hot Springs, Virginia, October 26–28, 1967. The Homestead has always been a favorite place for the Climatological to meet, and this session under William B. Bean (Fig. 30) as president was no exception. Bean, in his Presidential Address, gave an account of his World War II research on the development of rations, heat acclimatization, and equipment for forced marches at Fort Knox and in the American desert. It brought back memories of the war to many of the members and reinforced our knowledge of the durability of the human body under a variety of unpleasant stresses and strains.

FIG. 30. Bill and Gail Bean. (Courtesy of Dr. Theodore Woodward)

In the summary of his address, he said the following: "In a laboratory established to study soldiers in tanks during World War II, my colleagues and I were able to find ways to study the physical, physiological, and emotional characteristics of young soldiers. We measured the adaptive change to heat and cold, the vagaries of water and salt needs, of clothing and fitness. The biological rules for atabrine dosage, absorption and blood levels which we found permitted medical officers in areas of hyperendemic malaria to eliminate this disease as a military problem. Measurements of physical health and fitness as well as complicated field laboratories gave us the means for comprehensive testing of emergency rations." Out of all of these experiences he innovatively selected those of greatest interest to the members of the Climatological. He ended with Pope's words, which still hold: "The proper study of mankind is man."

Robert A. Good, in the Gordon Wilson Lecture, described his outstanding work on lymphatic tissue and its relation to antibody development, phylogenetically and embryologically. Stewart Wolf, in the Jeremiah Metzger Lecture, discussed neural mechanics in sudden cardiac death. In the evening, Professor Frederick D. Nichols of the University of Virginia entertained the membership with lovely slides depicting the background material that formed the substrate for the bloom of Jeffer-

sonian architecture, impressive evidence of the renaissance versatility of the third president of the United States.

In a volume like this, it is impossible to recount the interesting histories of all the members of the Climatological. One who exemplified an appreciation of clinical medicine and of scientific endeavor was Alphonse Raymond Dochez,[8] who died on June 30, 1964 at the age of 82. He had held the title of John E. Borne Professor of Medical and Surgical Research at Columbia University. Dochez was born in San Francisco in 1882; his family finally settled in Baltimore and Dochez entered Johns Hopkins in 1899, receiving the A.B. in 1903 and then the M.D. from the medical school four years later. One story of his undergraduate days at the Hopkins is worth mentioning. At about Christmas-time of his freshman year in medical school, he was informed that in all likelihood he would fail anatomy. He was shocked by this information and expressed incredulity. The professor replied that he had never seen him in the laboratory on Saturdays for the entire autumn term. "But," interjected Dochez, "I always go shooting on Saturday." One was left with the impression that in the first place he did pass anatomy, and in the second place his career as a gunner was curtailed if not terminated. The year after graduation, he worked in Welch's laboratory studying the effects of feeding animals an iodine-free diet. Following this, he obtained a fellowship in pathology at the Rockefeller Institute under Opie; this was an important year for him as he wrote four papers on the subject of proteolytic enzymes in the liver. In 1910 the Hospital of the Rockefeller Institute opened under the directorship of Rufus Cole, and Dochez became an assistant resident as well as bacteriologist to the Hospital. He remembered with amusement asking Noguchi if one could possibly become a bacteriologist in three weeks. Noguchi's reply is not recorded, but Dochez did become a bacteriologist and remained a microbiologist until the end of his career. His appointment at Rockefeller was also a clinical one, and he served as assistant resident and then resident for a period of five years, during which he collaborated in that institution's famous studies on pneumonia. The team, of which Dochez was a vital member, established a biological classification of pneumococci into specific types; discovered the specific soluble substance that confers the specificity; showed that the substance is of capsular origin; and demonstrated its presence in blood and urine of patients during the acute stage of pneumonia. They also pointed out the importance of type-specific antibodies in the mechanism of recovery from pneumococcal pneumonia. This led directly to the production of anti-pneumococcal type-specific horse serum, which Dochez demonstrated as efficacious in treatment of type I pneumonia. This serum was, in fact, the only effective therapy until the introduction of sulfapyridine.

After working in the clinical study of respiratory disease in World War I as a major in the Medical Corps, he returned to the Johns Hopkins medical school in 1919 as associate professor of medicine. It was there he began his studies of the streptococcus and its relationship to scarlet fever, which he continued when he joined the staff at Columbia in 1921 as professor of medicine. When Dochez started his studies of scarlet fever, the streptococcal etiology of that disease had never been established and was looked upon by many with skepticism. Dochez showed that there was a direct relationship between streptococcal pharyngitis and scarlet fever and that most of the strains of streptococci isolated belonged to a single specific type; using this single strain, by an ingenious method he produced a potent antiserum in horses. This antiserum injected intradermally would blanch the rash of scarlet fever and given parenterally had a striking therapeutic effect. An epidemic of scarlet fever in New Haven provided the first large-scale opportunity to try the serum, and its effects were enthusiastically reported by a number of observers. At the conclusion of his studies of this disease, Dochez shifted to the last of his three major fields of endeavor. This was the common cold, or perhaps more literally, common upper respiratory infections. These studies were pursued in his usual orderly and systematic manner. He and his collaborators convinced themselves that the bacteria of the upper respiratory tract were not of primary etiological significance. Similar studies failed to incriminate the gram-negative filter-passing anaerobes. Then using first chimpanzees and later *Homo sapiens* as experimental animals, he showed that typical colds could be produced by the exposure of these animals to bacteria-free filtrates. In other words, he demonstrated the viral etiology of common respiratory disease. Unfortunately, at that time, the techniques of viral cultivation were not adequate to allow indefinite propagation of infectious agents. At the end of the 1930s, Dochez found himself more and more involved in administrative work and in 1940 he was appointed chairman of the department of bacteriology at the College of Physicians and Surgeons, a post he held for nine years. Dr. Oswald T. Avery remarked in 1949, when presenting to him the Kober Medal of the Association of American Physicians: "Throughout his studies there is a unique continuity of thought centering in the dominant problem of acute respiratory diseases. The results of his work are not random products of chance observation; they are the fruits of years of wise reflection, objective thinking and thoughtful experimentation." He served as president of the American Clinical and Climatological Association, the American Association of Immunologists, and the Association of American Physicians. Dochez was widely read and had a knowledgeable appreciation of music. As an eligible bachelor, he was much sought-after by New York society. A lady once remarked to him that for a scientist he seemed to

spend a good deal of time in various boxes at the opera. His rejoinder was that, while he might seem to be in a state of suspended animation, this was, in fact, the time in which he did much of his most solid and productive thinking. And not infrequently, he would return from the Metropolitan Opera, discover Dr. Avery (with whom he shared an apartment) reading quietly in bed, and then sit down in full evening dress and with intense animation describe to his old friend some of the illuminating thoughts on the subject of microbiology that had occurred to him during the second act of *La Traviata.*

Among the interesting papers on the scientific program were: "Starvation and Survival," by George F. Cahill, Jr. and Oliver E. Owen; "The Time Course of the Development of Collateral Circulation following Gradual Coronary Occlusion in the Pig," by Henry D. McIntosh and his collaborators; and "Staphylococcal Bacteremia: Demographic, Clinical and Microbiological Features of 185 Cases," by Leighton E. Cluff and his co-workers. Lewis B. Flinn gave a very interesting and provocative discourse on the relationship of climatology to medicine, a return to the field of medicine so important in the early development of this society.

THE EIGHTY-FIRST ANNUAL MEETING

The eighty-first meeting was held at the Abbey Fontana, Wisconsin, from October 14 to 16, 1968, with Howard P. Lewis in the chair. A lovely hot Indian summer prevailed on Lake Geneva to help make this meeting in a new midwestern setting a great success. Arthur Colwell, chairman emeritus of the department of medicine at Northwestern, was the president's guest. Dr. Colwell had a summer house on Lake Geneva and through his generous and thoughtful hospitality, the golf course of the Big Foote Country Club was opened to the members. A great disappointment was the absence of Francis Rackemann. It would have been his 40th consecutive meeting.

Hod Lewis and his lovely wife presided over a meeting characterized by relaxed informal gatherings and excellent papers. The Presidential Address was a thoughtful, scholarly indictment of the overemphasis on specialization and underdelivery of complete care to the whole patient. One of the most amusing events occurred after George Schreiner's delivery of his paper on glomerular permeability in the nephrotic syndrome. With the permission of the president, he made a few comments on the Presidental Address. He spoke as follows:

> I just want to reassure him that we are represented in one of the newer specialties in internal medicine, and that we have a moral on our bulletin board, "Nephrology is the last remaining form of general practice." Not too long ago, I had an experience epitomizing some of the problems he pointed out and this was a consultation on a tiger at the Washington Zoo who was a very valuable animal. He was the father of

the first white tiger that has ever been born in captivity. This tiger had been treated for two months by a cat specialist for diabetes because he had hyperglycemia, polydipsia, and polyuria. Being a generalist I did notice that the urine was foaming and did a urinalysis. This slide shows you what a tiger cast looks like. We found these hyaline casts to contain epithelial cells and inflammatory cells and many inclusions as you can see. We stained these with Sudan III and they are the fat bodies characteristic of the nephrotic syndrome. This tiger had a BUN of over 300, and the reason he had hyperglycemia was not diabetes but uremic pseudo-diabetes which, of course, is unresponsive. This next slide shows you a uremic tiger in the end stages so you can see what a terrible disease uremia is. We did a peritoneal dialysis on this tiger. The first go-around was 12 liters of fluid, and I want you to know that this is probably the first time anyone has put a tank into a tiger.

Tinsley Harrison gave a very erudite talk, as the invited Gordon Wilson Lecturer, on "Heart Disease and Heart Failure: Some Recent Progress and Some Future Challenges." At the beginning, he indicated that Hod Lewis's invitation had brought to mind the dictum that old men are fond of offering good advice in order to console themselves for their inability to set bad examples. His failure to recall the author of this aphorism was explained by the following stanza:

I've learned to use bifocals,
My dentures fit me fine,
I can live with my arthritis,
But I surely miss my mind.

This lecture, and the charming way in which it was delivered, reveals the respect, admiration, and love that Tinsley Harrison inspired in the members of the Climatological, many of whom were his colleagues, students or both. His influence on medical education and cardiac research has been felt around the world.

Robert Wilkins gave an excellent Metzger Lecture on his long years of experience with hypertension.

Martin Cummings spoke after dinner about the renaissance versatility of John Shaw Billings. In this talk he brought out several close relationships between Billings and the Climatological, although Billings himself was not a member. In the minutes of the Climatological Association for 1887 the following appears: "At the close of the afternoon session on Wednesday, the members visited by invitation the hospital of The Johns Hopkins University under the guidance of Dr. J.S. Billings." It was Billings who in June 1891, wrote to Robert Koch and obtained the first supplies of tuberculin, which he gave to Welch, who, in turn, had it tested clinically under the direction of Osler and others at Johns Hopkins. Throughout many volumes of the *Transactions* there are descriptions by members of their experiences with tuberculin in the treatment of the disease—for many years so important a part of this Association's scientific programs. Of course, as has been pointed out, one of the new subjects debated in the early volumes of the *Transactions* beginning with 1891

was the efficacy of tuberculin. These years were rightly called the "Era of Tuberculin Delirium." Many distinguished members of the Climatological were involved in the early history of tuberculin in the United States—Alfred Loomis, Abraham Jacobi, Alexander C. Abbott and others—all friends of Dr. Billings. The second reference to Billings occurs in the Association's *Transactions* for the year 1893, when the annual meeting was held in Philadelphia. At the invitation of Provost Pepper and Professor J.S. Billings, a luncheon was enjoyed in the library building of the university. In 1886, Pepper spoke of Billings in his Presidental Address entitled "A Contribution to the Climatological Study of Consumption in Pennsylvania" before the third annual meeting of the Association:

> In addition to the material thus placed at my disposal, I have made liberal use of the mortality and vital statistics as prepared by Dr. John S. Billings for the census of 1880. Nor can I neglect this opportunity of referring to the great practical value of this colossal work. Despite the serious defects of the statistics resulting from the absence of any national system of registration of vital statistics such as is relied upon by all other civilized nations for the purpose of ascertaining the actual movement of the population, the improved method employed in this tenth census and the ability shown by Dr. Billings in the arrangement and analysis of the results render the two volumes which have just appeared highly valuable to the profession and highly creditable to the genius and energy of their distinguished author.

Other papers that rounded out the scientific excellence of this meeting were: "Familial Alpha$_1$ Antitrypsin Deficiency and Pulmonary Emphysema," by James F. Hammarsten and his colleagues; "*Escherichia coli* Epidemiology, 1960–1968," by Robert G. Petersdorf; and "The Minimal Infectious Dose of Adenovirus Type 4: The Case for Natural Transmission by Viral Aerosol," by Robert B. Couch, Vernon Knight, R. Gordon Douglas, Jr., Samuel H. Black, and Bruce H. Hamory.

L. Whittington Gorham,[9] who was president of the Climatological in 1936, died on July 27, 1968. Gorham graduated from the Albany Academy (1902), Yale University (B.S. 1906) and Johns Hopkins University (M.D. 1910). He served as a medical house officer at Johns Hopkins and then spent a year of study and travel in Europe, returning to Boston City Hospital to work in pathology. He moved to Albany Medical College as an instructor in medicine in 1913. After World War I he progressed up the academic ladder, becoming in 1937 director of the department and professor of medicine of the Albany Medical College. From 1948 to 1951, he also served as professor and coordinator of the division of oncology of the Albany Medical College. In 1951, he retired and became director of the Public Health Research Institute of the City of New York. Throughout his life he kept returning to his early love of pathology and in 1960 became research associate and later visiting professor to the department of pathology at Cornell, from 1957 on working as an investigator at the Jackson Laboratory in Maine.

At this meeting, F.T. Billings, Jr. ended his distinguished service as secretary-treasurer and was succeeded by J. Edwin Wood III.

The Eighty-second Annual Meeting

The eighty-second meeting was held October 20 to 22, 1969 at Hilton Head Island. F. Tremaine Billings, Jr. was the president. Here swimming during the day and cocktail parties by the moonlit sea offered finishing touches to the feeling of unspoiled beauty. Golf among the pines and palms with an occasional alligator emphasized this all the more. President Billings gave an intriguing address entitled "A Conscience—Its Anatomy and Its Application to the Practice of Medicine." It should be required reading for all. The usual mechanical failures reached a new level during Evan Calkins's talk. In fact, it was not possible to show his slides at all. He turned defeat into victory, however, with such a splendid presentation that Dr. Francis Wood was moved to raise the question later of whether Dr. Calkins actually had any slides. Dr. Eric Cruickshank, in delivering the Gordon Wilson Lecture, brought an entirely new chapter of medicine to many of us. The pneumonias and heart failures seemed far away as he described the strange maladies created by toxins from the plants of Jamaica. Jim Wyngaarden's Metzger Lecture on gout in its opening phrases humbled all not sharply trained in biochemistry. He then proceeded to elucidate these complexities to the point that the audience should then have been able to describe the basic mechanisms even to a medical student without getting caught out. Frank Paddock provided an unusual talk and film for the evening entertainment on Tuesday, a historical review of the Arctic with some added medical detection (which at times got a little too realistic for the ladies).

Many outstanding papers appeared on the scientific program. Alexander G. Bearn and his colleague B. Shannon Danes educated us about "The Genetic Secrets of the Humble Fibroblast." Francis P. Chinard and his colleagues gave a learned discussion of "Lung Water: Physiological and Clinical Significance." "Cholesterol and Cancer" was the topic chosen by Marvin D. Siperstein, while Elliot V. Newman and his co-workers discussed the "Quantitative Objective Assessment of Myocardial Ischemia." Another interesting paper was that of W. Gordon Walker and Henry N. Hulter concerning "Some Observations of the Metabolic Activity of Glomeruli."

The Eighty-third Annual Meeting

The eighty-third annual meeting was held at Ponte Vedra, October 26–28, 1970, under the presidency of Theodore E. Woodward[10] (Fig. 31). This second visit of the Climatological to Ponte Vedra was a notable one. Rattlesnakes threatened a golfer or two, gusty winds thwarted the would-

FIG. 31. Theodore E. Woodward, president of the American Clinical and Climatological Association, 1970

be outdoor dancers, swimmers were warned against something called "runout," and tasty wild mushrooms discombobulated the gastrointestinal tracts of a few intrepid investigators in spite of the expertise in this field attributed to Thornton Scott.[11]

The program was beautifully balanced among new data with the complex theories they generated, clinical observations suggesting new approaches to patients, and historical treatises of considerable interest, the most notable of which was Roger Mitchell's discussion of the first meeting of this Association.

In his Gordon Wilson Lecture, James G. Hirsch demonstrated the ability that truly outstanding men of science often have of describing a complex system, in this case the digestive tract of cells, in easily understood terms. Dr. A. McGehee Harvey, in the Metzger Lecture, gave a valuable summary of the work from his and other laboratories concerned with myasthenia gravis. Dr. John Z. Bowers took the group behind the

Bamboo Curtain for a fascinating look at medicine in China as the after-dinner speaker on Tuesday evening. President Woodward gave an entrancing Presidental Address entitled "Typhus Verdict in American History."

The scientific program was an example of the talent exhibited by the new members brought into this Association each year. "Starvation and Body Nitrogen" was discussed by George F. Cahill, Jr. and Thomas T. Aoki. Attallah Kappas and his colleagues presented their studies of "The Occurrence of Substances in Human Serum which Can Regulate Porphyrin Synthesis in Liver Cells." "Lactic Acidosis" was the subject of Arnold S. Relman's presentation. Walter M. Kirkendall and J. Michael Kioschos discussed their "Studies on Patients with Renal Artery Stenosis: The Diagnostic Value of Plasma Renin Activity Measurements." Dudley P. Jackson presented his interesting data on "Hereditary Disorders of Blood Coagulation Due to Defective and Deficient Synthesis of Protein." "Three Dimensional Radiography" was discussed by Richard J. Johns and his collaborators, while Richard B. Hornick and his group talked about their "Investigations into the Pathogenesis of Diarrheal Diseases." One of the highlights of the meeting was the interesting presentation by Nicholas P. Christy and his collaborators on "Gustav Mahler and His Illnesses." They attempted to define Mahler's cardiac disease accurately, to show that the physical illness affected his work only insofar as his awareness of it refined his later style. They suggested that many earlier writers have tended to overemphasize his "neuroses" because his life was filled with turbulence and drama, because he made a powerful impression on many contemporaries, and because many of these left copious if inaccurate reminiscences. Mahler's early life and later sufferings "explain" very little about his music; as with other first-rate artists, he had qualities ordinary people are reluctant to recognize—creative genius and the will and capacity to overcome formidable obstacles within and outside himself.

THE EIGHTY-FOURTH ANNUAL MEETING

The eighty-fourth annual meeting was held at The Homestead in Hot Springs, Virginia, October 25–27, 1971, under President A. McGehee Harvey.[12] This was the tenth visit of the Climatological to Hot Springs, the first having taken place in 1895. The return to a traditional meeting place offered a time to reflect on the history of the organization (Fig. 32), and the proud and heroic attendance at the meeting by our beloved colleague Chester Keefer gave special meaning to such reflections. The Presidential Address was entitled "Some Autumnal Gleanings" and took its theme from Ludwig Edelstein's delightful essay, "Sydenham and Cervantes." The lesson to be learned was that the basic problem in

FIG. 32. This group at the Homestead (1971) is obviously in a relaxed mood. Left to right: Claire Mirick, Lucretia Fisher, Murray Fisher, George Mirick, Dan Ellis, Celeste Woodward (Courtesy of Dr. Theodore Woodward)

Sydenham's day was, in fact, the same problem that faces us today: how to combine learning and experience in the medical curriculum so as to produce the best type of medical practitioner. The proper balance between the two in a curriculum beset by intense competition for time is a continuing, and increasing, problem. Science is the backbone of medicine but it is of limited use to the practitioner who lacks a rigorous apprenticeship of experience in dealing with patients and their problems. In our process of revolutionizing the medical curriculum, we must bear in mind that scientific learning should sustain, but should not be substituted for, clinical experience. There is danger that the steady, almost overwhelming increase in scientific knowledge will crowd out of the curriculum the type of experience needed for the acquisition of clinical skills, and for the solution of the problems encountered in medicine.

Dr. Albert L. Lehninger, in presenting the Gordon Wilson Lecture on his studies of the fundamental aspects of calcium metabolism, exhibited his extraordinary skill in presenting for the average physician the complexities of basic research. Marvin D. Siperstein, who was the Metzger lecturer, reviewed in a classically careful way his extensive investigations on abnormalities of cholesterol biosynthesis observed in the cancerous liver. One of the highlights of the meeting was the after-dinner talk by

Francis Wood, who stole the show in relating to us the stops he made in looking through his library. His talk was amply illustrated by many humorous and pertinent cartoons, which he had collected over many years. As the expression goes, "there wasn't a dry eye in the house."

Fran Wood recalled the circumstances surrounding his preparation for this talk: "Years ago Molly and I started cutting out the good cartoons that we saw in any magazine, mostly the *New Yorker* and *Punch*, and we used to hang them up over the stove in the kitchen. We still have quite a collection of them and each year, as we got used to them, we put some other ones up there; so eventually I had a large folder of lovely cartoons illustrating almost every asininity that the human race is subject to. So when Mac Harvey asked me to talk, I thought I'd talk about my library, but while I was looking through my library to prepare my talk about some of the reading that I had enjoyed I found a lot of these cartoons clipped in the front pages of each one of the books I opened. That gave me the idea of sharing some of these parts of my library that were not strictly literary."

Edwin Allen Locke,[13] a member of the Climatological since 1909, died at the age of 96. He was born in Halifax, Massachusetts, October 15, 1874. Locke graduated from Harvard Medical School in 1901 and was appointed house pupil at the MGH. He was awarded one of the early Dalton Scholarships to investigate osteitis deformans and allied afflictions. Upon completion of his service at the MGH, he entered the private practice of medicine and began what was to be a long and distinguished association with the Boston City Hospital, becoming in 1924 physician-in-chief of the Fourth Medical Service (Harvard). He was made a clinical professor of medicine in 1923. During the influenza pandemic of 1918, a special ward service for the study and treatment of influenza and pneumonia was established by Locke at the City Hospital. A research laboratory for bacteriological studies, sponsored by the department of hygiene at Harvard, was attached to this service, a combination of facilities that paved the way for the studies of specific type pneumonias and their specific serum therapy carried on and further expanded in the Thorndike Memorial Laboratory by Maxwell Finland, whose outstanding contributions in this field were to be widely recognized.

In 1905, William Osler instigated the formation of the Interurban Clinical Club shortly before his departure for Oxford. Locke was one of 24 young physicians chosen as founding members. Also among this group was David Edsall, then at the University of Pennsylvania. The two became firm friends and in him Locke recognized the abilities, training and interest necessary for a department head at a time when understanding of disease was limited largely to its clinical manifestations with but little attention being paid to its mechanisms. Frederick Shattuck was retiring as chief of the medical service at the MGH and Jackson Professor

of Clinical Medicine at Harvard. Locke, then on the staff of the City Hospital, saw the need for progressive leadership and felt that Edsall, then professor of therapeutics at Pennsylvania, would be an ideal choice as Shattuck's successor. It was largely as a result of his farsightedness, his earnestness, and the respect in which he was held by his friends and associates, that he was able to convince the trustees of the MGH and Dr. Christian, then dean of the Harvard Medical School, to offer the appointment to Edsall. Richard Cabot, who was the heir apparent, gracefully accepted this decision. Locke played an equally important part in Edsall's subsequent selection as first part-time and then as full-time dean of the Harvard Medical School. Through it all he was Edsall's trusted friend, confidant and advisor, during what was an interesting, changing, and at times tempestuous period in the evolution of the medical school and its associated hospitals. It was Locke who suggested the establishment of a separate teaching service for Tufts and Harvard at the Boston City Hospital and later played an important part in persuading its trustees to support the first full-time academic department of medicine for teaching clinical investigation and care of patients in a municipal hospital. He also played a leading role in the action of the trustees in inviting discussions with Tufts and Harvard prior to making appointments on the Third (Tufts) or Fourth (Harvard) Medical Services. The importance of bringing medical schools into the process of staff appointments at the City Hospital was great at that time when the triad of teaching, research and medical care was generally neither recognized nor accepted.

Locke had the facility of gaining the confidence of the young as well as of his peers and seniors. Francis W. Peabody, shortly after completing his service as house pupil at the MGH, sought Locke's advice as to whether he might be forgotten by the Boston medical hierarchy if he went to Hopkins for further experience. Locke recognized the advances being made at Hopkins at that time and assured Peabody that such a course could only be beneficial. In 1921, Peabody was appointed director of the Thorndike Memorial Laboratory, which was then being planned and which was dedicated in 1923. At the time he was appointed also director of Harvard's clinical service, of which Locke was physician-in-chief. A quotation from Dr. Perrin H. Long, recounting his experience as a resident in the Thorndike and an intern on the Fourth Medical Service, best describes the teaching rounds of Peabody and Locke:

> One of the major attractions of the Fourth Medical Service in the mid-twenties was the morning visit three times a week by Dr. Peabody, three times by Dr. Locke. Two entirely different approaches to medicine were presented to the students and house staff by these two men. In retrospect, they never held divergent or clashing opinions. In Dr. Peabody the house officer had the nigh-perfect example of the philosophical, well-rounded, kindly physician who was well trained and deeply steeped in the scientific tradition and approach of the day, but whose paramount interest was

always in the welfare of his patients. Dr. Locke, on the other hand, was the finished Beacon Street clinician, very well versed in the natural history of disease, although without great interest in the experimental approach to individual medical problems. At the same time, he had a very real respect for the scientific basis of clinical medicine.

In 1921, Locke invited George Minot and Gerald Blake to join with him in what was probably the first organized group practice in Boston. Formal articles of agreement were drawn up; there was a common laboratory and a unified system of medical records; journals were shared; and the practice of one member was covered by another during absence for medical meetings or otherwise. An important benefit to the group's members was the opportunity to exchange ideas and consult together on interesting or perplexing problems. The group at "311 Beacon" was later joined by a series of young internists who were also members of the Climatological. Dr. Donald King was an associate for several years and Dr. John Graham and Richard P. Stetson were associates at a later date. In 1935, Locke resigned his Boston appointments and became full-time professor of hygiene and director of health and athletics at Williams College. Dr. Locke's contributions to medicine were many but his greatest role was that of a trusted and respected advisor to those who were molding Harvard medicine during the early third of this century.

There were a number of interesting papers on the scientific program. John C. Beck and his colleagues discussed their work on "Growth Hormone, Control of Release and Characteristics in Plasma." Henry G. Kunkel and his colleagues discussed "The Varied Nature of the Immune Deficiency States," while Thomas R. Hendrix presented his "Studies on the Pathogenesis of Cholera." William J. Williams and Frank L. Call II chose as their topic "Phospholipid Metabolism in Human Platelets." James W. Raleigh discussed "Rifampin: Clinical Experience with a New Anti-Tuberculosis Drug." "Effectiveness and Mode of Action of Orthophosphates in Patients with Calcareous Renal Calculi" was the topic presented by William C. Thomas, Jr. Jacques Genest and his co-workers presented "New Evidences of Disturbances of Mineralocorticoid Activity in Benign Uncomplicated Essential Hypertension." Ernest Craige and Nicholas J. Fortuin elucidated their "Studies on Mitral Valve Motion in the Presence of the Austin Flint Murmur."

The Eighty-fifth Annual Meeting

The eighty-fifth annual meeting was held at the Ponte Vedra Club, the third at this location, from October 30 to November 1, 1972 (Fig. 33) under the presidency of Lewis Dexter.[14] In his Presidential Address, Dexter pointed out the almost one-to-one historical relation between sitting in chairs and thrombophlebitis. Both made their appearance several centuries ago. With increasing use of the chair, there has been

FIG. 33. The Wainwrights and Flinns at Ponte Vedra, 1972. Left to right: Lewis B. Flinn, Charles W. Wainwright, Mrs. Lewis B. Flinn, Bernice Wainwright

an increasing incidence of venous thrombosis. This does not by itself indicate cause and effect, but is highly suggestive in view of the circulatory stasis that is promoted by chair sitting and by the known action of stasis in promoting intravascular thrombosis.

The Gordon Wilson Lecture, by Eugene Braunwald, on "Protection of the Ischemic Myocardium" was an outstanding event, as was the Metzger Lecture by George F. Cahill, who brought the group up-to-date on ketosis, with special support and explanation of his position as a "confirmed teleologist." The after-dinner speakers, F. Tremaine Billings, Jr. and Roger O. Egeberg, revealed the full story of their travels together in Russia, undertaken for the official purpose of gaining insight into the Russian medical system.

The meeting included memorials to two of the important members of the Climatological. Walter Albert Baetjer[15] died on August 24, 1972, having been born in Baltimore on November 7, 1883. After graduation from Johns Hopkins University, he entered its medical school and attained an outstanding record. He played a very important role in rejuvenating the Climatological at a period during its potential disintegration. Dr. Baetjer practiced medicine in Baltimore for many years, after having served in the clinical laboratory of the Johns Hopkins

Hospital. He remained a constant attender of the Climatological meetings until his vision made it too difficult for him to travel.

On February 3, 1972, malignant disease brought to a close the outstanding career of Chester Scott Keefer.[16] Born in Altoona, Pennsylvania in 1897, he entered the Johns Hopkins University School of Medicine after receiving his Bachelor's and Master's Degree at Bucknell College. After graduation from medical school in 1922, he served on the house staff at Hopkins, where he came under the influence of Thayer, Longcope and Bloomfield, and was trained in the traditions of Osler and Welch. He became the first resident at the new University of Chicago School of Medicine, and then spent two years at the Peiping Union Memorial College in China. He then returned to Boston, where he remained for the rest of his career. After ten years as a member of the faculty of the Harvard Medical School and director of the Fourth Medical Service at the Boston City Hospital, he moved to the Boston University School of Medicine as Wade Professor, then dean, and finally as director of the school of medicine. The Medical Research Center of Boston University was the flowering of his dream, and the dedication of the Chester Scott Keefer Auditorium of the Center was his last public appearance. He contributed widely to many medical activities of importance. The federal government commanded his services as medical advisor to the first Secretary of the Department of Health, Education and Welfare. He served the National Research Council as chairman of its Committee on Chemotherapeutics and in other capacities. It was he who exhibited such complete fairness in controlling the distribution of penicillin in the early days of its use. In 1960, he was president of the American College of Physicians and in 1963, of the Clinical and Climatological Association.

The 1972 Annual meeting marked the 50th, or Golden, Anniversary of two of the members, J. Burns Amberson[17] and Paul D. White.[18] Both were elected to membership in 1922. Unfortunately, neither one could attend the meeting to describe what the Association was like 50 years ago. Dr. White nevertheless sent a manuscript describing the predictions he made when he was elected to membership about the future problems of heart disease. His article was entitled "The Early Infancy of Preventive Cardiology" and reflects his extraordinary vision and perception in those early days of his career. In it he quotes from his paper of 1922 entitled "The Diagnosis of Heart Disease with a Special Reference to its Importance in Preventive Medicine."[19] The method of diagnosis presented there, suggested by Richard Cabot in 1914 and independently promoted by the New York Association for the Prevention and Relief of Heart Disease some years later, was the basis of White's own textbook written on Capri in the spring of 1929 and published by Macmillan in 1931.

A number of outstanding scientific papers were presented at this meeting. Charles A. Sanders and his colleagues, including W. Gerald

Austen, discussed "Intraaortic Balloon Pumping: Current Status and Clinical Experience." James F. Toole and his colleagues talked about "Transient Episodes of Cerebrovascular Ischemia (TIA's): Effects of Medical or Surgical Management on Natural History of the Illness." Attallah Kappas and his group explained "The Induction of a Carcinogen-Metabolizing Enzyme in Human Skin." Sheldon M. Wolff and Harvey B. Simon presented their work on "Granulomatous Hepatitis and Prolonged Fever of Unknown Origin." There was an interesting historical paper by William B. Bean and William C. Thomas, Jr. on "Walter Reed in Florida." J. O'Neal Humphries, Richard S. Ross, Gottlieb C. Friesinger, E. Eugene Page, and Lewis Kuller discussed their observations on the "Natural History of Ischemic Heart Disease in Relation to Arteriographic Findings—A Twelve-Year Study of 224 Patients."

THE EIGHTY-SIXTH ANNUAL MEETING

The eighty-sixth annual meeting was held at the Broadmoor, Colorado Springs, Colorado, October 22–24, 1973 under the presidency of John Eager Howard.[20] President Howard's address was entitled "Some Effects of the Changes in Science and Mores on the American Clinical and Climatological Association." He pointed out that we find ourselves in a unique position relative to most professional groups, able to aid in restoring the confidence and esteem the public once felt toward the physician, and to have our image return to what Robert Louis Stevenson once said of us: "He (the physician) is the flower (such as it is) of our civilization." Howard remembered an event that occurred in 1948, the year he attended his first meeting—an event that has since stood out vividly in his memory:

> In those days it was customary, as it still is, for new members to display their wares by presenting papers. On that particular morning, Eugene Landis spoke on studies of capillary function, which he had carried out the previous year in Krogh's laboratory. In order there followed George Thorn on adrenal insufficiency, I spoke on the first uses of potassium as a therapeutic agent and McGehee Harvey gave a treatise on the mechanisms of neuromuscular transmission. At the end of that session, Dr. James Waring, a doyen of this association, approached my wife and asked if we would join him at lunch. On the way to lunch he said to Lucy: "I am sure those speakers this morning are all nice boys and will make fine members, but really, Mrs. Howard, I didn't understand a damn thing they were talking about." The pertinence of this wistfully made remark was not so obvious to me then as it is now.

Howard pointed out that a vivid panorama of the changes in our profession over the past 75 years may be had by reading the titles in the programs of the Association of American Physicians, a group organized in 1886 for the purpose of broad exchange of information among the leading teachers and practitioners of that day. As a matter of fact, there is no better way to study the historical evolution of clinical medicine as

it exists today than to read *in toto* these brief papers. Here—and to a great extent reflected also in our own programs—is unfolded in vignette form the advance of knowledge and attitudes toward the adverse forces that assail us physically and emotionally, the forces with which man is in constant conflict for survival. There appeared abruptly new insights into biochemical aberrations such as diabetes and pernicious anemia, immense changes in the weapons and strategy of our ever-present war with microorganisms, and the provision to us of synthetic compounds that mimic or actually reproduce natural hormones—these are but a few of the highlights in the amazing avalanche of scientific information hurled upon us in the past three quarters of a century.

The changes in the teaching and practice of medicine are also spread before the reader of the programs of the Interurban Clinical Club, a small organization and also an offspring of Osler, which was organized specifically for the purpose of exchanging ideas on the teaching of medicine. If one looks at the programs of this group over the intervening 75 years, one is once again struck by the almost overwhelming impact of the science of medicine on medical education and practice. There is now rarely any mention of teaching or the art of dispensing medical knowledge. The programs are confined almost exclusively to studies in chemical and physical aspects of morbid processes at the molecular level. It would perhaps be oversimplification to call this pattern the losing struggle between the art of medicine and its academia.

Howard said:

> In reading through the earlier Presidential Addresses and the minutes of the business meetings [of the ACCA] in the 1920s and 1930s, one gets the feeling of generating tensions among our members as to the basic concepts of the organization's aims and purposes. Founded originally, as the name implied, for communication among friends for better management of persons suffering with respiratory disorders, mainly tuberculosis, the growing pains of scientific medicine soon affected the membership. Some of these, of whom Drs. Minot and Rackemann appear to have been the leaders, were pressing their wholly clinically-oriented colleagues to elect new members who were highly trained in the basic sciences and were carrying out clinical research with the newer technology. It was interesting to note that, in the recordings of one business meeting, a founding member became so heated as to assert that "anyone who cannot see that climate is the major therapeutic agent in the treatment of tuberculosis is a plain damned fool." One gathered that some older members feared two things: first, that the close friendships and good fellowship, which had always been preeminent in the Association, would be harmed by admission of younger men more oriented to the laboratory than to bedside medicine—much like the fears expressed by practicing physicians over the scheme of "full-time" clinical departments, phrased by Sir William Osler as "inevitably to culminate in a society of medical prigs confining themselves to ivory towers"; and, second, the worry existed that the membership would gradually be weaned from the special personal relationship between physician and patient which had long been its dominant theme.
>
> Yet it is obvious that the closer medicine comes to mathematical precision, the better becomes accurate diagnosis, upon which good therapeutic approach depends.

> And so those of the newer breed won over their confreres and some full-time clinical researchers were elected. Fortunately for all of us, wise judgment generally prevailed in the choice of these so-called scientifically minded members.
>
> It has never been clear to me why a person interested in investigation could not also be a wise and warm physician if he truly wanted to take the time and trouble to gain a wide experience with sick persons. For it is really the innermost endowments of the man, intellectual capacity and generosity of nature, which combine to mould a great physician. It is the whole person who counts, not his training or special interests. Not everyone is gifted with the imaginative mind to analyze data and from them to synthesize new ideas which can be put to the test of experiment. Yet it is a "must" for those whose natural endowments fit them best for practice to be exposed to the other group and to keep up with the enormous mass of new knowledge which is so essential to the optimum care of their patients. The teacher investigator can also profit greatly from the association with the men who do the actual caring for the sick. For it is clinical observation of the unusual in disease, nature's own experiments, that offer to the investigator his best clues for clinical research. The programs of this Association, changing perhaps over the years to more scientific tones, seem to show admirable adaptation by the Association to the needs and types of new data for the practicing physician. I can recall no meetings from which I have not derived much useful information, new slants on old ideas, and occasionally the correction of tenets taught me in medical school as unassailable facts. These are perhaps reasons why the Association ever gains in strength and prestige and maintains so high a registration of members at meetings. . . .

The Gordon Wilson Lecture, by Gerald Auerbach, reviewed the complex subject of biosynthesis, secretion and actions of parathyroid hormone in a very effective way. Richard B. Hornick, in his Metzger Lecture, put together a story about salmonella infections that was fascinating to everyone. In the Tuesday evening after-dinner address, another great Climatologist and former president of the Association, Charles Wainwright, regaled us with history and stories of "Maryland, My Maryland."

The meeting was saddened by the death on March 5, 1973, at the age of 85, of Dr. Francis Minot Rackemann,[21] one of the most revered members of this Association (See p. 225).

Among the outstanding scientific papers was one by John B. Stanbury on "The Varied Manifestations of Endemic Cretinism." J. Michael Criley, a new member, presented the work that he had done with his collaborators on "Mitral Dysfunction: A Possible Cause of Arrhythmias in the Prolapsing Mitral Leaflet Syndrome." Carol Johnson Johns, the wife of Richard J. Johns, presented "A Ten Year Study of Corticosteroid Treatment of Pulmonary Sarcoidosis," while Edmund R. Yendt, another new member, discussed his "Ten Years' Experience with the Use of Thiazides in the Prevention of Kidney Stones." "Roseto Revisited: Further Data on the Incidence of Myocardial Infarction in Roseto and Neighboring Pennsylvania Communities" was the subject of the talk by Stewart Wolf and his collaborators. Victor McKusick and a group of his associates presented an excellent paper on "Acquired and Heritable Defects in Collagen Synthesis and Fibrogenesis," while another new member, Rob-

ert L. Ney, talked about his "Observations on the Influence of ACTH on Adrenal Cholesterol Metabolism." "Effects of Ethanol on Drug Metabolism in the Liver" was the subject discussed by another new Climatological member, Harold J. Fallon. Stanley E. Bradley and Jaime B. Coelho presented their "Studies of Glomerulotubular Interaction." Another in the series of excellent papers presented over the years on ultrasound by Joseph H. Holmes was his discussion of the "Diagnosis of Pancreatic Pathology Using Ultrasound."

The Eighty-seventh Annual Meeting

The eighty-seventh annual meeting was held at the Williamsburg Lodge, October 21–23, 1974, under the presidency of H. St. George Tucker, Jr. His medical observations on Jamestown, Virginia, "Jamestown—Paradise or Pest Hole," was thoroughly enjoyed by all. The after-dinner speech was given by Dr. Ludwell Johnson, who discoursed very pleasantly about the beginnings of Williamsburg. In the Gordon Wilson Lecture, Robert S. Schwartz and his colleague, Robert Lewis from Tufts, described experiments on systemic lupus erythematosus in dogs specially bred to have the disease; results suggested that it might be an infection. The Jeremiah Metzger Lecture was given by Jacques Genest on the renin-angiotensin system and essential hypertension. His was a marvelous demonstration of the importance of a continuing line of investigation carried out over a period of years.

J. Willis Hurst presented a memorial in appreciation of Paul Dudley White,[22] who had died during the year. Most impressive were the words of Howard Sprague, who had been scheduled to speak four years earlier at a dinner honoring Dr. White as part of the first meeting of the Paul Dudley White Society. Dr. Sprague became ill at luncheon and was unable to present his comments, but his prepared text contained the following paragraph:

> It is not the accumulation of years alone that has built the image of Paul Dudley White. His industry, his unconquerable optimism, his ability to induce his patients to take heart, his gift of serving as an example. His friend Albert Schweitzer once said, "Example is not the main thing in life—it is the only thing." He has been able to convince men that what Sir William Temple recommended is probably true—"The only way for a rich man to be healthy is by exercise and abstinence, to live as if he were poor." But Paul's reputation has the solid foundation of his labors as a teacher, for in the incubation of his laboratory under Ward G and in the basement of the Bulfinch Building were hatched the birds, you in fact, who have flown out to inhabit the roosts of cardiology throughout the earth. This is the stuff of a man's immortality; for as Henry Adams wrote, "A teacher affects eternity; he can never tell where his influence stops."

A happy event was the celebration of Walter Alden Griffin's 100th birthday. (On August 22, 1974 the churches of Sharon, Connecticut rang

their bells one hundred times in Griffin's honor.) Griffin was elected to membership in the Climatological at the 24th annual meeting in the New Willard Hotel, Washington, D.C. in May, 1907. At that time, nine of the original members were still active. He presented a paper on 160 "arrested cases" of pulmonary tuberculosis treated between 1891 and 1906. In 1907, seventeen of twenty-seven papers presented were on tuberculosis and climatology.

Graduating from Harvard (*magna cum laude*, 1897) and from Harvard Medical School (*cum laude*, 1900), Griffin served his internship at the Boston City Hospital in his final year of medical school and arrived at Sharon in 1901. He was the only physician there, in a town of 2,000. He started his practice with a horse and buggy and then bought a second-hand automobile. He was a general practitioner and over the years delivered most of the present-day inhabitants of Sharon. Early in his career, he was asked to work in the Sharon Sanitarium, of which he later became head. He made many personal contributions to the recreational activities for the young in the Sharon area. In a newspaper interview,[23] he mentioned with particular pride a playground financed and built under his direction in 1930 and the purchase of a tract of land in 1940 as a winter sliding area for children. He deeded both to the Sharon Civic Foundation, which he had founded. Further, on his 100th birthday, he still held office hours. He was one of four M.D. centenarians in the United States and possibly the only one still practicing medicine. He greatly enjoyed the meeting in 1970 at Ponte Vedra. The Council, by special order, sent good wishes to Dr. Griffin and expressed the hope of seeing him in Bermuda in 1975.

This year marked the death of Dickinson W. Richards, Jr.[24] on February 23, 1973. Richards was elected to active membership in 1946. Born in Orange, New Jersey, he attended the Hotchkiss School and received his A.B. from Yale University in 1917, the M.A. in physiology from Columbia in 1922 and the M.D. from Columbia one year later. He took his internship and residency in medicine at Presbyterian Hospital. He then was a fellow at the National Institute for Medical Research in London, returning to the Presbyterian Hospital in 1928 where he served as an attending physician until 1945. In that year, he became director of the first medical division, Columbia, at Bellevue Hospital and in 1947 the Lambert Professor of Medicine at Columbia. At Bellevue, Richards was a familiar figure, making rounds with his resident house staff and students, or visiting André Cournand to discuss their joint experiments. His presentation before the Climatological in 1953 was a classic article on the teaching of medicine ("Ivory Tower, or Horse and Buggy?") The approach was Socratic. He claimed to be "wholly inexpert" and saw as his job the posing of a few questions. The article was low-key, contained a number of references to classic authors, and like the man himself, was

quiet, witty, scholarly, and understated. His collaboration with Cournand led to the development of cardiac catheterization and earned them the Nobel Prize in Medicine in 1956, which they shared with Werner Forssman of Germany. These brilliant studies paved the way to open-heart surgery and direct clinical application in basic research.

Again the scientific program was populated with excellent papers by some of the newer members of the Climatological. "Tropical Sprue: A Consideration of Possible Etiologic Mechanisms" was the topic presented by Charles E. Butterworth, Jr. Ralph L. Engle, Jr. discussed "HEME: A Computer Program for Diagnosis-Oriented Analysis of Hematologic Disease." Sheldon E. Greisman and Richard B. Hornick presented their work on "The Nature of Endotoxin Tolerance," and James C. Allen and Peter C. Kelly discussed their "Evidence for Antigenic Differences Among Pyocins of *Pseudomonas aeruginosa*." John Vaughan and his colleagues talked about their interesting data on "Cellular Aspects of the Immunology of Rheumatoid Arthritis," while "Characteristics of Immune Complexes in Connective Tissue Diseases" was the topic discussed by John S. Davis IV. W. Tabb Moore and his colleagues talked about "The Evaluation of Bone Density Findings in Normal Populations and Osteoporosis," while Robert M. Salassa gave an excellent talk on "Primary Aldosteronism and Malignant Adrenocortical Neoplasia." "Determinants of Diuretic Responsiveness" was the topic presented by Roscoe R. Robinson and his collaborators. François M. Abboud and his co-workers discussed "Selectivity of Autonomic Control of the Peripheral Circulation in Man." Gottlieb C. Friesinger and William S. Hillis gave an interesting presentation on "Reactive Hyperemia as an Index to Coronary Arterial Narrowing." "Precapillary Pulmonary Hypertension; Its Relationship to Pulmonary Venous Hypertension" was interestingly discussed by James E. Dalen, Lewis Dexter, and their colleagues. Andrew G. Wallace and his collaborators presented their data on "Evaluation and Treatment of Patients with the Wolff-Parkinson-White Syndrome."

The Eighty-eighth Annual Meeting

The eighty-eighth annual meeting was held at the Castle Harbour Hotel, Tucker's Town, Bermuda, October 27–29, 1975, under the presidency of Theodore J. Abernethy (Fig. 34). The Presidential Address was on the history of health problems in Bermuda and contained many thought-provoking details. The Gordon Wilson Lecture was given by J. Fraser Mustard of McMaster University in Hamilton, Ohio. Mustard reviewed his lifelong work on the function of platelets in thrombosis. The Jeremiah Metzger Lecture was presented by Dr. Victor A. McKusick on "New Genetic Insight into Old Diseases" and was a very erudite discussion of an interesting subject. Following the Tuesday evening

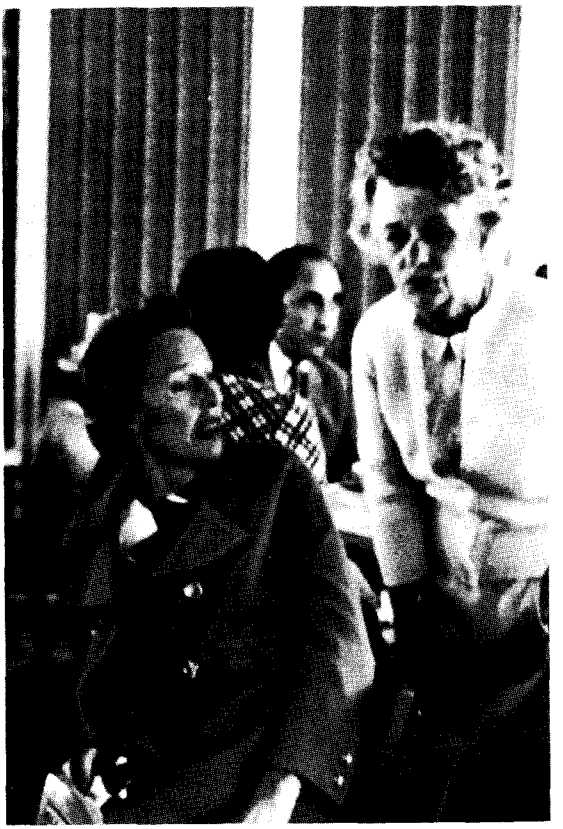

FIG. 34. Two presidential wives looking a little perplexed. Left to right: "E" Harvey and Emily Abernethy. Bob Austrian, the president for the centennial year, 1984, is in the background. (Courtesy of Dr. Theodore Woodward)

dinner, St. George Tucker introduced his cousin Teddy Tucker of Tucker's Town, Bermuda, who entertained the group with descriptions of his numerous adventures exploring ancient shipwrecks and searching out their treasures.

A memorial was presented for Chester Morse Jones,[25] who died in Peterborough, New Hampshire, on July 26, 1972. Born in Portland, Maine on March 29, 1891, he moved to Massachusetts in 1894, graduating from Williams College in 1913. After an unsuccessful venture into the business world, he entered Harvard Medical School and graduated in 1919. Thereafter his professional career was associated with the Massachusetts General Hospital and the Harvard Medical School, in which he became clinical professor of medicine. Early in his career, he was awarded a William O. Moseley Traveling Fellowship and worked for a year in

France with Professor Leon Blum at the University of Strasbourg. In 1937 he became President of the American Gastro-enterological Association, and in 1952 he was elected president of the American Clinical and Climatological. From his election to membership in 1938 until his death he was a devoted member of this organization, contributing regularly to its scientific programs. In 1960, he received the Julius Friedenwald Award of the American Gastro-enterological Association. He was president of the American College of Physicians in 1961–62 and received the Alfred Stengel Award of that organization in 1967. In 1970, he was made a Master of the College.

Among the outstanding scientific papers were: "Mechanisms of Circulatory Dysfunction in Orthostatic Hypotension," by Hermes Kontos and David W. Richardson; "Left Ventricular Performance in Coronary Artery Disease by Systolic Time Intervals and Echocardiography," by Arnold M. Weissler and his colleagues; "Blood Gas Disequilibria and Exercise Hyperpnea," by Giles F. Filley; "Valve Replacement for Aortic Regurgitation: Factors Influencing the Results," by Allan L. Friedlich, Edward F. Bland and their collaborators; "Self-Administered Cardiopulmonary Resuscitation by Cough-Induced Cardiac Compression," by J. Michael Criley and his colleagues; "Heart-Reactive Antibody, Viral Illness, and the Postpericardiotomy Syndrome," by Mary Allen Engle and her colleagues; "Non-Osmolar Regulation of Renal Water Excretion," by Robert W. Schrier and his co-workers; "Bad News and Good News: Present Status and Future Prospects of Human Kidney Transplantation," by John P. Merrill; "Streptococcal Infections, Acute Nephritis and Rheumatic Fever in Trinidad: Further Observations," by David P. Earle and his colleagues; and "Aquatic Models of Human Bodily Mechanisms and Disease," by Stewart Wolf.

In the discussion of an interesting paper on "Richard Bright in Iceland—1810" by E. Lovell Becker and (by invitation) Robert M. Kark, the subject of owls in Iceland was resurrected (see Ref. 49, Chapter 8). The remarks again illustrate the lighter side of the Climatological, which provides so much charm and stimulation for its members:

> Dr. James Toole (Winston-Salem): I would like to suggest that the neonatal tetanus may have been caused not by flying birds as suggested by Bright but by a custom which persists even now in countries such as Nigeria and India. Natives put a poultice of dung on the stump of the umbilical cord after the baby is born despite all attempts to educate them not to do so. Why they do this is unknown but it is an ancient tradition, widespread in primitive cultures. Perhaps it causes hemostasis but it also results in neonatal tetanus.
>
> Dr. Becker: That is very interesting. There was no such comment in the Iceland literature.
>
> Dr. William Bean (Galveston): I enjoyed this enormously. Many of you are probably aware that Richard Bright wrote one of the best travelogues: *Travels Through Lower Hungary*, which was published in 1819 and has now become a very rare book. I would like to recall to memory what some of you heard me say after my paper on the small

and the trivial at our meeting at Cooperstown in 1960 under the benevolent reign of Marshall Fulton. My comment was on the shortest chapter of any book I know. I quoted it as being the *History of Iceland* by the good Bishop Pontoppidan.* The chapter on Owls in Iceland reads "There are no owls in Iceland." (applause)

* I had read this in Albert J. Nock's *Memoirs of a Superfluous Man*—incidentally, a splendid biography. John Blake, in the rare books collection of the National Library of Medicine, tells me that Bishop Erik Pontoppidan never published any history of Iceland. I then found out from Quincy Mumford, Librarian of Congress in Washington, that Niel N. Horrebow wrote a book entitled *Natural History of Iceland*, published in London in 1758. The good scholar Horrebow had [a note] on page 61, chapter XLII, concerning owls. It reads as follows: "There are no owls of any kind in the whole of Iceland." But then rather shockingly in a footnote he says: "Mr. Anderson says there are various species of owls in Iceland, as the cat-owl, the horn-owl, and the stone-owl." He likewise published a print of one "catched in the farther part of Iceland on a ship homeward bound from Greenland." Von Proil wrote a book on Iceland which has a chapter concerning the snakes of Iceland. It runs as follows: "There are no snakes in Iceland." I apologize for perpetrating an error, but am delighted to remind you that Ireland and Iceland are devoid of serpents and under the best of circumstances, there are only a few owls. I atone for any injury I have done to the spirit of Bishop Pontoppidan and brother Horrebow.

The Eighty-ninth Annual Meeting

The eighty-ninth annual meeting was held at the Ponte Vedra Inn, October 25–27, 1976, under the presidency of Stewart Wolf, whose Presidential Address was entitled "Social Anthropology in Medicine: The Climate You and I Create." The Gordon Wilson Lecture was given by Dr. Allan Goldstein whose title was "The History of the Development of Thymosin: Chemistry, Biology and Clinical Applications." Robert Bird gave the Jeremiah Metzger Lecture on the subject of "Information Transfer in the Service of Medicine." (Unfortunately, Bird's untimely death occurred shortly after the meeting.) One of the meeting's outstanding features was Orville Horwitz's after-dinner talk entitled "History of the World From the Beginning to 2076 with Particular Emphasis on the History of Women's Lib, the State of Florida, Medicine and the Bicentennial." This was one of the funniest evenings that we have had in years. Pete was, of course, a real pro at such efforts, having served as the editor of the *Harvard Lampoon.*

Theodore Badger presented a memorial for Cleaveland Floyd,[26] who was one of the pioneers in this country in the treatment of tuberculosis, elected to the Climatological Association in 1910. Just one year later, he presented his authoritative paper on "The Treatment of Tuberculosis with Artificial Pneumothorax" at the Association's meeting in Saranac Lake, New York. In 1912 he and Dr. Samuel Robinson demonstrated the technique of pneumothorax in a tent ward for tuberculous patients in the Bulfinch courtyard of the Massachusetts General Hospital. As a result of his success with this form of treatment, Floyd was called upon to administer pneumothorax to Dr. Edward Livingston Trudeau.

Floyd was born in Providence, Rhode Island, April 12, 1880. Later his

family moved to Brookline, Massachusetts, and he graduated from the high school there. He went directly to Harvard Medical School, graduating in 1903. Two years after he entered Harvard Medical School, a college degree became necessary for admission to the study of medicine. Interning at the MGH for 16 months, Floyd then spent six months at the Boston Lying-In, then at McLean, then completed his medical training at the Children's Hospital in Huntington Avenue. After maintaining a busy practice, Floyd taught bacteriology at Harvard Medical School for 16 years, was appointed as an assistant in bacteriology in 1907, then ascended the academic ladder to become associate professor of bacteriology from 1917 to 1923. He then retired from academic life to carry on a full-time private practice. He was not a prolific writer, but his paper with Robinson was the first account of pneumothorax in the treatment of tuberculosis in this country.[27] In 1907, Floyd opened the first public clinic for tuberculosis; it was associated with the Boston Consumptive Hospital, which was taken over by the City of Boston Health Department in 1925. In that year, Floyd became its physician-in-chief, serving for several years. In 1965, he was presented the Henry D. Chadwick Medal of the Massachusetts Thoracic Society "for distinguished contributions to the study and treatment of tuberculosis and other thoracic diseases." He was 85 years old at the time but still in practice. Floyd died at the age of 90 in Cambridge, Massachusetts.

Irving S. Wright presented a memorial for Robert L. Levy.[28] Levy was born in New York City, October 14, 1888 and died November 23, 1974. He graduated from Yale in 1909 and from The Johns Hopkins University School of Medicine in 1913, after which he completed a residency and served as an instructor in medicine at Hopkins. He then left to teach physiology at Harvard, following which he received an associateship in medicine at what was then the Rockefeller Institute. His next move was to Columbia University's College of Physicians and Surgeons, where he became professor of clinical medicine and director of the department of the cardiology at the Columbia-Presbyterian Medical Center. He had a distinguished career in medicine, serving as president of the New York Academy of Medicine, the New York Heart Association, and the American Clinical and Climatological Association. Levy always pursued a tradition of scholarship, and he developed a remarkable collection of first and early editions of the classics of the cardiovascular literature. This included 39 early editions of William Harvey's works, with a priceless first edition, from 1628, of *De Motu Cordis* complete with errata slip—probably the most treasured of all works dealing with the heart. This was a gift from his father-in-law, the Honorable Jesse L. Straus, United States Ambassador to France. His valuable collection of 122 volumes also included first editions of many pioneers: Sir Thomas Browne, Fabricius de Aquapendente, René Descartes, Thomas Bartholin, Gio-

vanni Morgagni, and William Withering. It was presented to the New York Academy of Medicine in 1974, where it is now available to scholars and biomedical historians.

The variety of fare presented by the scientific program is revealed by the titles of a few of the papers: "Chemoreceptors of the Heart," by Thomas N. James; "The Selection of Medical Students," by F. T. Billings, Jr.; "Immunological Studies in Acute Leukemia," by George Santos and his colleagues; "Thomas Jefferson and Smallpox Vaccination," by Byrd S. Leavell; "A Review of the Prospects for the Control of Cancer Through Screening," by Nathaniel I. Berlin; and "The Fate of Individuals Containing Radium," by Austin Brues.

The Ninetieth Annual Meeting

The ninetieth annual meeting was held at the Broadmoor in Colorado Springs, October 24–26, 1977, under the presidency of Gilbert Blount. The Presidential Address was entitled "Colorado—Environment—Medicine—A Continuum." In this address, he pointed out that seven physicians previously elected to the presidency of this Association were from the state of Colorado. All of these men came to Colorado because of tuberculosis and for the salubrious effects of the climate and environment. Although it was the supposedly favorable effects of the local environment that brought people to Colorado, early members of the Association were cognizant of the fact that not all effects of the environment were beneficial. In the early *Transactions* from 1886 to 1908, there were ten papers on the adverse effects of altitude on the heart and circulation. The first paper on this subject—"The Effects of High Altitudes on Cardiac Diseases"—was delivered by Alfred L. Loomis, the Association's first president, at the third annual meeting in 1886. He presented six case histories illustrating the deleterious effects of patients arriving at altitudes between 4,000 and 6,000 feet. It is doubtful that the altitude was significant, but his thoughts are of interest. "The ventricular dilatation which unquestionably was the cause of the sudden development of the distressing symptoms, seemed to be directly due to the effects on the cardiac circulation of the changes from a low to a high altitude." He believed dilatation to be the result of "an abnormal degree of blood pressure" which "if the resulting power of the cardiac walls is greatly impaired may produce cardiac dilatation" (this before Riva Rocci's development of the sphygmomanometer, 1899).

In 1888, Frank Donaldson of the University of Maryland had offered a paper entitled "On the Causes of Cardiac Failure in High Altitudes." He concluded that "the chief and immediate cause of dyspnea and cardiac failure may, I think be traced to the diminished pressure on the heart

walls and their consequent dilatation." His explanation was that the barometric pressure at sea level presses against the interior of the lungs and pushes them against the heart and great vessels and the inside of the chest walls. He stated that at an altitude of 10,000 feet the pressure on the heart would be only 494 mm Hg; actually, the altitude of Leadville is 10,150 and its barometric pressure 525. He noted, " . . . Now the arterial pressure and therefore, the intracardiac pressure would be the same as if at sea level when the pressure on the heart walls was 760 mm and the result would be a stretching and dilatation of the heart walls—especially of the right side—and this is precisely what is found in many of those who go onto high altitudes for their health or for other reasons and what we found in experiments upon animals." Two years later, in 1890, Donaldson gave another paper on the same subject and came to the same conclusion. Henry Sewall presented a paper at the annual meeting of 1902 entitled "Altitude in Fact and Fancy" (see p. 59). He discussed the effect of altitude on the course of pulmonary tuberculosis and stressed the point that many patients with tuberculosis do not do well at high altitudes. Earlier, Charles Denison had appreciated the fact that patients with respiratory diseases other than tuberculosis, namely emphysema, also do not tolerate higher altitudes. The last reference to the heart and circulation and altitude was by Joseph N. Hall, a Denver physician, who presented a paper in 1908 entitled "Cardiac Danger in High Altitude," discussing the potential hazard for patients with known heart disease who exercise vigorously at high altitude. Of great interest is his report concerning a patient without known heart disease who ascended too abruptly to high altitude: "One patient had been a hunter and trapper in the Rocky Mountains until 50 years of age when he purchased a ranch in the Arkansas Valley at an elevation of only 3,000 to 4,000 feet. Seven years later some friends visited him from the East, and he took them up Long's Peak, over 14,000 feet in altitude. He suffered greatly from palpitations and dyspnea, but his grit being better than his judgment, he continued until he dropped from exhaustion and dyspnea. When he started he was a hale-looking ranchman of 57 years, with no suggestion of heart disease." This case history may well represent one of the earliest reports of an individual with high altitude pulmonary edema.

James J. Waring brought Gilbert Blount to the Colorado Medical School in 1950, although he did not have tuberculosis. When an acquaintance inquired as to whether Blount knew why one of the gentleman's yearling steers had developed heart failure and died while pastured in South Park at an elevation of 10,000 feet, Blount's interest in the effect of altitude (hypoxia) on the heart and in particular the pulmonary circulation was kindled. This was his first introduction to brisket disease of cattle and initiated his studies on the effect of hypoxia on the

pulmonary circulation—studies that continued for many years, and led to the development in 1960 of a high-altitude laboratory located in St. Vincent's Hospital in Leadville, Colorado, at an altitude of 10,150 feet.

The Gordon Wilson Lecture, entitled "The New Cell Biology and Its Implications for Medicine," was given by Dr. Theodore T. Puck. His group's observations about solutions to the problem of cancer were most exciting. The Jeremiah Metzger Lecture, entitled "Of Gold and Pneumococci," was given by Dr. Robert Austrian. This was a fascinating talk leading up to his development of the antipneumococcal vaccine.

Mr. Gerry Roach spoke after the banquet on his experiences in climbing Mt. Everest.

The Association's oldest member, Walter A. Griffin,[29] died on August 22, 1976 at the age of 102.

Again the program was dominated by presentations of new members, including: "The Significance of Reversible and Irreversible Perfusion Deficits in the Evaluation of Ischemic Heart Disease," by Richard Gorlin and his colleagues; "The Natural History of Coronary Artery Disease: An Update on Surgical and Medical Management," by Robert E. Whalen, Andrew G. Wallace and their co-workers; "Rationale for Increased United States Interest in International Health," by John H. Knowles; "Effects of Liver Disease and of Aging on the Disposition and Elimination of Sedatives," by Steven Schenker; "Immunologic Determinants of Experimental Neurologic Autoimmune Disease and Approaches to the Multiple Sclerosis Problem," by Philip Y. Paterson and his associates; "The Rationale for Immunotherapy in Respiratory Allergies," by Philip S. Norman; "Some Persons at Rush," by James A. Campbell; and "A Novel Pathway of Metabolism for Arachidonic Acid in Human Platelets," by Daniel Deykin and his colleagues.

At this meeting, Richard J. Johns became secretary-treasurer; he succeeded J. Edwin Wood III, who had served since 1968.

The Ninety-first Annual Meeting

The ninety-first annual meeting was held at Pinehurst, North Carolina, October 23–25, 1978, under the presidency of Dr. David Earle. His Presidential Address was on malaria, and it was filled with interesting information about an important and historically significant disease. Christian J. Lambertson, of the Institute for Environmental Medicine at the University of Pennsylvania, gave the Gordon Wilson Lecture. Lambertson was a pioneer in the development of modern deep diving techniques, and his address entitled "Undersea Medicine—The Limits of Human Tolerance" was particularly interesting. Carl Gottschalk gave the Jeremiah Metzger Lecture on "The Nephrons in Bright's Disease: Their Structure and Function." Dr. Gottschalk is an outstanding inves-

tigator in this field and gave a polished lecture. The after-dinner speaker was Stretch Becker who outdid himself as raconteur, magician, physiologist, and sommelier.

A memorial was presented for Worth B. Daniels,[30] who died on June 6, 1978 in Washington, D.C. Born in North Carolina in 1899, he was the son of Josephus Daniels, publisher of the Raleigh *News Observer* and later Secretary of the Navy during Woodrow Wilson's administration. Worth graduated from the University of North Carolina in 1920 and from the Johns Hopkins University School of Medicine in 1924. He married Josephine January, a fellow medical student, and one of their sons, Worth Daniels, Jr., practices medicine in Baltimore and is also a member of the Climatological.

After postgraduate study in London and New York, Daniels entered private practice in Washington in 1926. During World War II, he was a colonel in the U.S. Army, serving as chief of the medical service of Fort Bragg Regional Hospital and later as medical consultant to the 8th Army in the Southwest Pacific Area. Toward the end of the war, he was chief of the medical service at the Walter Reed General Hospital in Washington. In 1946, he returned to private practice and became professor of clinical medical at Georgetown and senior attending physician at the Washington Hospital Center, as well as a consultant to the Surgeon-General's Library. Instrumental in uniting this great library with those of the other armed services and federal agencies to form the new National Library of Medicine, he was the first chairman of its Board of Regents. One of his prominent traits was the serenity that accompanies a quiet sense of self-confidence and security. It made him delight in telling stories on himself, as well as confessing his own ignorance freely and without any self-consciousness. It led him to ask for information from the most junior intern to the highest-ranking professor. His rounds were seasoned with wit and laughter. Well read, he was an enemy of any sham or pretense. He saw knowledge as the means to help the patient get well. Few men had the ability to inspire so many colleagues with loyalty and affection. He rarely left a bedside without the patient's feeling better, enriched with a stronger belief in the goodness of man. He was an ideal example of the typical member of the Climatological: a sincere and talented physician, with all of the friendliness and charm that is so important a part of the Climatological.

When meningococcemia, the scourge of army recruits, appeared as an epidemic at Fort Bragg, Daniels led the way to the quick publication of some of the first reports on the effectiveness of the sulfonamides. When a mysterious malady afflicted soldiers camped in a certain bivouac area, he collaborated in the description of so-called Fort Bragg Fever. Later, serum that had been saved identified these patients as having an obscure strain of Leptospira.

As a civilian, his curiosity about the large neck nodes in a young girl who lived across the street from him led to correspondence with a virologist in Cincinnati, a bacteriologist in New York City, and a pediatrician in Paris. After he had published the first series of cases of cat-scratch disease in the English language, he corresponded with clinicians on every continent. For years his office refrigerator was the world's main source of skin-test antigen for cat-scratch disease.

As usual, the scientific program presented a series of excellent papers, emphasizing the increasingly scientific base of clinical investigation. Among the outstanding papers were "The Platelet as an Inflammatory Cell," by Ralph L. Nachman; "Role of Cellular Proteases in Viral Pathogenicity," by Purnell Choppin; "The Diagnostic Implication of Calcification of the Coronary Arteries as Detected by Cardiac Cinefluoroscopy," by T. J. Reeves and T. A. Lombardo; "Maturation of Stimulus Recognition and Insulin Secretion During Tissue Culture of Fetal Pancreatic Islets," by Norbert Freinkel and his collaborators; and "Studies by Echocardiography of Regional and Global Cardiac Function During Exercise," by Nicholas J. Fortuin and his colleagues.

THE NINETY-SECOND ANNUAL MEETING

The ninety-second annual meeting was held at the Castle Harbour Hotel in Bermuda from October 22 to 24, 1979, under the presidency of Richard S. Ross.[31] The Presidential Address was on the subject of "Coronary Bypass Surgery: Status 1979," which brought the membership up to date on this very pertinent and important topic.

Daniel Nathans, Nobel laureate, presented the Gordon Wilson Lecture on "The New Genetics." Nathans demonstrated his capacity to present extraordinarily complex material in a very straightforward and understandable manner for those not familiar with the field in any detail. Sheldon M. Wolff delivered the Jeremiah Metzger Lecture on "The Pathogenesis of Fever in Human Subjects." Wolff, who was trained in infectious disease, had been interested in the subject of fever in all of its aspects for many years and gave an excellent summary of the current knowledge in this area.

On Tuesday evening, Ernie Craige reviewed cartoons that he had drawn over the many years of his medical career. He had a marvelous eye for the humorous aspects of his profession and his drawings were enthusiastically received by the membership.

Benjamin M. Baker and Richard S. Ross presented a memorial for E. Cowles Andrus,[32] professor emeritus of medicine at Johns Hopkins and an internationally known cardiologist, who died on March 26, 1978. Andrus was born in Kaatsban, New York in 1896; received his bachelor's

degree from Oberlin in 1916 and his M.A. the following year; and then graduated from the Johns Hopkins University School of Medicine in 1921. He remained at Hopkins as a member of the house staff and specialized in cardiology under E. P. Carter, who was then in charge of the cardiographic laboratory. Andrus was awarded a research fellowship from the National Research Council for study at the National Institute for Medical Research in London and at University College in London under Sir Thomas Lewis, whose electrocardiographic studies of the heart were then attracting wide attention. During the second year of the fellowhsip, he was a visiting fellow at the University of Vienna. He returned to the Johns Hopkins house staff, where he served a two-year term as resident physician under Dr. Warfield T. Longcope. For several years, he remained a member of the full-time faculty, and then entered part-time practice. He continued, however, to devote much of his energies to education and research at the Johns Hopkins Medical Institutions. He had a long association with the *Bulletin of the Johns Hopkins Hospital*, being twice managing editor (1930–34, 1947–49); for a number of years he was assistant dean of the medical faculty. Over many years, he was physician-in-charge of the adult cardiac clinic.

His earliest work in medical science concerned the influence of pH change on heart rate, a study that he began at Oberlin and published while he was a medical student working in the physiological laboratory of William H. Howell at Johns Hopkins. Andrus and Carter demonstrated later that rise in pH produced an increase in heart rate and an acceleration in conduction. These and related findings led them to propose that the rhythmic polarization and depolarization of cardiac membrane underlying the heart beat was the result of a transmembrane gradient in hydrogen ion concentration. The theory was correct but oversimplified, insofar as others showed that pH played a secondary role to the primary one mediated by potassium flux.

Later, while in Sir Henry Dale's laboratory in London, he established the changes in pH and in CO_2 concentrations that greatly altered chronotropic responses to adrenalin and vagal stimulation. The validity of his results was rediscovered by successive generations of investigators. Many of these early studies depended on what would now be regarded as astonishingly simple preparations, which were often constructed in an ingenious manner. For example, in 1928 Andrus and Carter needed to drive a perfused heart at a given rate and to introduce an additional stimulus after a controlled interval. To do this they enlisted Harold Wheeler in the department of physics and together designed a device that amplified the cardiac action current so that it could activate a magnet. This triggered the fall of a pendulum, which in the course of its arc could close any one of a number of switches and thereby deliver a stimulus at the needed time. Using this device, they discovered that in

the presence of vagal stimulation a single shock delivered at the end of the refractory period regularly produced atrial fibrillation.

Beginning with his years in combined research and practice, Andrus's interests became more wide-ranging. In 1940, he and Philip Hill demonstrated that "angiotonin," i.e., angiotensin, provoked constriction of coronary arteries and conspicuously increased cardiac output in heart-lung preparations. This observation was overlooked for 20 years but when confirmed by others, contributed to the conclusion that the augmented cardiac output associated with elevated angiotensin levels is one of the contributing causes of sustained hypertension.

Because he was active in laboratory and animal research as well as clinical investigation, he was able in the Second World War to bring a combination of talents to the practical problems of aviation medicine, serving as a consultant in this field to the National Research Council. From 1944 to 1946, he was chief of the division of medicine in the Office of Scientific Research and Development, and he received the Certificate of Merit from President Truman for these wartime services. Andrus played an important part in planning the gradual enlargement of the National Institutes of Health and served as special consultant to the Surgeon-General beginning in 1946, chairman of the NIH Cardiovascular Study Section from 1946 to 1952, and senior scientific advisor to the National Heart Institute from 1957 to 1962.

These tasks were not a substitute for excellence in the practice of clinical cardiology. In the 1950s, his collaboration with Alfred Blalock led to a series of papers that helped to establish the principles of selection and surgical treatment of patients with mitral stenosis. He served as president of the American Heart Association from 1954 to 1955. Andrus had a fine sense of humor, was an excellent guitarist, and often provided entertainment for the Climatological meetings by singing folk songs. He was an outstanding example of the expert clinician, talented clinical investigator, and good companion that characterizes the Climatological.

President Ross assembled an outstanding scientific program; some of the most memorable papers were: "Immunologic Concepts Relating to the Pathogenesis of Diffuse Interstitial Lung Diseases," by Herbert Y. Reynolds; "The Pathogenesis of Hepatitis B: Possible Mechanisms of Viral Replication and Tissue Injury," by David J. Gocke; "An Association Between the Renin Angiotensin System, Blood Pressure and Potassium Intake," by W. Gordon Walker and his colleagues; "Predictors of Clinical Course After Survival of Myocardial Infarction," by J. O'Neal Humphries and his associates; "The Association of Increased Lung Water and Normal Left Ventricular Filling Pressure in Human and Canine Myocardial Infarction," by Paul N. Yu and his co-workers; and "Reduction of Urinary Oxalate Excretion in Primary Hyperoxaluria by Diet," presented by Edmund R. Yendt and his associates.

THE NINETY-THIRD ANNUAL MEETING

The ninety-third annual meeting was held at Williamsburg, November 2–5, 1980 under the presidency of R. Carmichael Tilghman, who preserved his perfect attendance record. President Tilghman had attended each scientific session and meeting of the Climatological since his election to membership in 1958. His Presidential Address on Captain Cook and his clinical contributions were drawn in large measure from an original printing of Captain Cook's journal, which he found in the library of Mrs. Tilghman's family home on the Eastern Shore of Maryland, Wye House. His lecture reflected Tilghman's scholarly pursuits into the historical documents, and his remarks were beautifully illustrated by colored slides taken during his travels.

The Gordon Wilson lecturer was Dr. Richard T. Johnson of Johns Hopkins, who gave a masterful talk on the relationships between viral infections and disease of the central nervous system. He illustrated slow viral infections and their production of chronic neurological diseases in both animal and man, the late consequences of viral infections on the developing nervous system, the special effect of self-limited viral diseases on the fully developed nervous system as a consequence of its inability to replace cells which have been lost, and the potential relationship of these findings to neurologic diseases that at present have no known etiology.

In the Metzger Lecture, Dr. Charles C.J. Carpenter traced the historical basis of the therapeutic management of cholera. In addition to illustrating the dramatic improvements and outcome produced by vigorous replacement of salt and water, he pointed out multiple instances throughout history in which proven effective therapy was rejected by the medical establishment and its leaders because the suggested approach flew in the face of established dogma.

The after-dinner address was given by Dr. Saul Farber, who used *Fiddler on the Roof* to illustrate the cultural features of life in the eastern European *shtetl.* He alternated between excerpts from the original cast recording and old photographs from that era.

The Council approved the report of the *ad hoc* Committee chaired by F. Tremaine Billings, Jr., which reached the unanimous opinion, "No changes in the constitution or by-laws need be made. Women can be elected to the Association on the basis of their own merit. This is as it should be. No special membership would be automatically awarded to anyone whether it be male or female spouse." In keeping with the times it was reported that it would be possible to obtain continuing medical education Category I credit for attending the scientific sessions.

This meeting was marked by the presentation of an unusual number of memorials for deceased members. Many had been important contrib-

uting members to the Association. Francis D.W. Lukens[33] was a past president of the Climatological. Born in Philadelphia on October 5, 1899, he died in Pittsburgh on December 4, 1978. He graduated from Yale in 1921 and four years later from the medical school of the University of Pennsylvania. After internship and residency at the Pennsylvania Hospital, he was a fellow under Warfield T. Longcope in Baltimore, where he studied nephritis. In 1930, he returned to Pennsylvania and worked for two years with T. Grier Miller in the section on gastroenterology. He then joined the staff of the recently organized Cox Institute for the Study of Diabetes and worked with Cyril Norman Hugh Long, its first director. Their series of classic experiments profoundly affected the direction of research in diabetes and endocrinology. It was Lukens and Long who first reproduced the Houssay phenomenon, which showed that pituitary ablation had a profound effect on diabetes. They then showed that adrenalectomy had a similar effect, prolonging the survival of depancreatized animals and reducing the degree of hyperglycemia and hyperketonemia. They demonstrated that this effect was due to the removal of the adrenal cortex, because it was not produced by adrenal demedullation or denervation. These observations proved that both the pituitary and the adrenal cortex had modulating effects on the insulin regulation of glucose and lipid metabolism.

In 1936, Lukens succeeded Long as director of the Cox Institute; he was first made chief of the diabetic section of the hospital of the University of Pennsylvania and was later promoted to a full professorship in medicine. Luken's collaboration with William C. Stadie, professor of research medicine, was very productive. They established a relationship between ketone body production and the rate of ketone body oxidation in depancreatized cats and man, and helped to establish the view that ketone body production is the predominant factor in the development of hyperketonemia in diabetic ketoacidosis. With Samuel Gurin and Roscoe Brady in the department of biochemistry, Lukens studied the impairment of hepatic fatty acid synthesis that results from insulin deficiency. He developed standardized methods for the experimental use of alloxan in diabetic animals. Producing persistent hyperglycemia in the cat by repeated glucose injections, he observed the resulting pathological alterations in the beta cell structure and function of the pancreas. He also first noted that insulin modified the effects of growth hormone on nitrogen balance.

Lukens was president of the American Diabetes Association in 1959–60, receiving its Banting Medal in 1960 and serving as its Banting lecturer in 1964. He was president of the Endocrine Society in 1964–65 and president of the American Clinical and Climatological in 1964. After he retired from his professorship at Pennsylvania, he returned to active

patient care at the Pittsburgh Veterans Administration Hospital, where he remained until shortly before his death in 1978.

Other prominent physicians memorialized at this meeting were Kenneth E. Appel, Theodore L. Badger, James Bordley III (see p. 228), Eugene C. Eppinger, John H. Knowles, Byrd S. Leavell, Edgar Mayer, Thomas M. McMillan, Jr., Stephen I. Morse, Vince Moseley, Donald M. Pillsbury, Henry T. Ricketts, Julian M. Ruffin, and John B. Youmans.

Among the outstanding papers on the scientific program were reports on experience with "Refugee Medicine in Thailand," by Celeste L. Woodward and by John Collins Harvey; Paul F. Griner discussed "Requirements for the Efficient Use and Precise Interpretation of Diagnostic Tests." An excellent talk was that of Victor A. McKusick on "The Human Genome through the Eyes of Mercator and Vesalius." "Naloxone and Weight Reduction: An Exercise in Introspection" was the topic of Theodore B. Schwartz's presentation. Hermes A. Kontos and his co-workers discussed the "Pathophysiology of Vascular Consequences of Experimental Concussive Brain Injury." John R. Graham talked about "Drug-Induced Localized Systemic Sclerosis." James E. McGuigan presented his studies on "The Role of Gastrin in Duodenal Ulcer," while Elliott Middleton, Jr. and his co-workers discoursed on "The Flavonoids: A Brief Review and Study of Effects on Antigen-Induced Histamine Release from Human Basophils."

THE NINETY-FOURTH MEETING

The ninety-fourth meeting of the Association took place at the Ponte Vedra Inn, Ponte Vedra Beach, Florida, October 18–21, 1981, with President James W. Haviland in the chair. Climatological disruptions in the form of a tropical depression had brought gale-force winds and rains just before the meeting convened, requiring closure of the coastal route to Ponte Vedra. Fortunately, this inclement weather subsided and the meeting took place under sunny skies. There were 130 members in attendance.

President Haviland invited H. St. George Tucker, Jr. to commemorate the anniversary of the surrender of the British troops by General Cornwallis at the Battle of Yorktown. Following this historic event, the President then described the eruption of Mt. St. Helens. He presented in picturesque detail the geological basis for vulcanism and traced the geology of Mt. St. Helens and the Cascade Ridge, illustrating his remarks with dramatic color photographs. The Gordon Wilson Lecture was given by Dr. Russell Ross, who brought together in a most lucid manner his extensive experience in the investigation of the pathogenesis of the lesions of atherosclerosis. His lecture presented an excellent background

for a number of the papers contributed by members on the subject of atherosclerosis and coronary vascular disease.

Leighton E. Cluff was the Metzger lecturer. In an effective address, he traced the extensive changes in medical education that have been produced by federal research grant support over the past few decades. He described in detail the analogous changes in our system of medical education—changes produced by the responsibilities of full-time staff for patient care and the revenue that such responsibilities generate. The after-dinner address was given by Samuel Proger, who traced, in a remarkably interesting way, the cultural history of the northern Florida region from antiquity to modern times.

The vigor of the Association was again documented by the election to membership of eight outstanding candidates, all of whom were active in academic centers and in teaching. The new members were: John E. Bennett, William B. Blythe, David R. Challoner, Edward J. Huth, Carol J. Johns, William N. Kelley, Robert C. Moellering, Jr., and Samuel O. Thier.

Another of the outstanding members of this Association, whose chief interest was tuberculosis, died on December 3, 1979. James Burns Amberson[34] earned his M.D. degree in 1917 at the Johns Hopkins University School of Medicine. A few months after graduation, while working in pathology under E. W. Goodpasture, he developed tuberculosis and was sent for treatment to the Loomis Sanitarium in Upper New York State. (As in so many other instances, members who distinguished themselves by their research, teaching and patient care in the field of tuberculosis began their careers under just these circumstances). From 1918 to 1929, Amberson was associated with the Loomis Sanitarium, ultimately as its physician-in-chief. In 1929, he joined the faculty of the College of Physicians and Surgeons, Columbia University, in New York City and served at Bellevue Hospital under Dr. James Alexander Miller as visiting physician responsible for the Bellevue Tuberculosis Service. He was professor of medicine at P&S from 1955 to 1965 and was the general director of the New York Tuberculosis and Health Association. He was the recipient of many honors including the Trudeau Medal, the award of a Mastership of the American College of Physicians and the establishment by his former residents and associates of the Amberson Lectureship, to be delivered each year at the meeting of the American Lung Association. From 1930 to 1955, the Bellevue Chest Service was an intellectually exciting place. The attending staff was of unusually high caliber, including such greats as Dickinson Richards and André Cournand. Pulmonary physiology, radiology, bacteriology and pathology were integral parts of this service and through it all Amberson was the

energizer and skillful leader of the program. He was 89 years old at the time of his death.

New or recently elected members of the Association presented many excellent papers, including: "Transforming Principle of the Pneumococcus: Rosetta Stone to the New Biology," by William A. Atchley; "Progress in Management of Patients with Infective Endocarditis," by C. Glenn Cobbs and his colleagues William E. Dismukes and Robert B. Karp; and "Advances in Blood Cultures," by John A. Washington II. However, one of the members of long standing, Rudolph H. Kampmeier, ended his silence of 28 years and presented a paper that allowed the *Treponema pallidum* to wriggle into the program after lying dormant for more than three decades. He gave an excellent history of the development of our knowledge of how to treat the pox and then presented his follow-up of 251 patients treated between 1944 and 1950 with penicillin. No evidence of late syphilis was identified among 173 of these patients who lived 20 or more years after their infection. He pointed out that although acute syphilis is still common in the pubic health clinics, penicillin has taken the core out of Osler's aphorism: "Know syphilis in all its manifestations and relations, and all other things clinical will be added unto you."

A review of the programs of this Association beginning in 1885 is very revealing. Those of the first quarter of a century were devoted in the main to tuberculosis and to extolling the climate in which the speaker happened to live. During this period and in the next two decades, seven papers linked syphilis to pulmonary disease and five explored syphilitic heart disease. Then came a flurry of several papers extending Keidel's research at Hopkins on the continuous treatment of the disease with arsenic and bismuth, and papers by J. Earle Moore, Hugh Morgan and Charles Mohr, who used this podium to describe their pursuit of this spirochete. Kampmeier thus reminded us that *T. pallidum* is still well and thriving but is subject to an efficient check rein. He predicted that it would have an extended period of hibernation insofar as the annals of this Association are concerned.

There were other interesting papers as well, illustrating the direction in which clinical medicine was progressing. Lewellys F. Barker and Roger Y. Dodd discussed "Viral Hepatitis: Lessons from Blood Donors"; Robert H. Waldman and his collaborators informed us about the current state of knowledge relating to oral immunization against influenza; and R. Gordon Douglas, Jr. and his colleagues described the changing virulence of influenza A viruses. There were an interesting series of papers on medical education, in addition to the Metzger Lecture. These included a discourse by William L. Morgan, Jr. on bedside teaching and an interesting presentation by Jeremiah A. Barondess on the content and process

in ambulatory care, representing notes from his very successful practice in internal medicine.

THE NINETY-FIFTH MEETING

The ninety-fifth meeting of the Association was held at the Arizona Biltmore Hotel in Phoenix, Arizona from October 24 to 27, 1982, with George F. Cahill, Jr. of Boston, Massachusetts in the chair. True to form, the advent of this meeting occasioned climatological abnormalities in the form of precipitation. The invariably hot and dry weather of Arizona was interrupted by an extended period of rain showers. Fortunately, they did not dampen the spirits of the assembled group at the evening receptions. There were 99 members in attendance.

President Cahill's scholarly and lucid address focused upon his long-standing interest in the metabolic underpinnings of energy metabolism in man and beast, including beasts that undergo prolonged starvation. The Gordon Wilson Lecture was given by Dr. Robert J. Lefkowitz, who described his work on the adrenergic receptors as a model for understanding the regulation of receptor action in general. Daniel D. Federman presented the Jeremiah Metzger Lecture on "The Determinance of Human Sexuality." He gave a very clear, sensible and tasteful discourse covering the genetic, embryological, endocrine and psychological aspects of the development of human sexuality.

The after-dinner address was given by Mrs. Clara Tanner, Professor Emerita of Anthropology at the University of Arizona. Her presentation, which covered the arts and crafts of native Americans in the southwest, was beautifully illustrated with color photographs, which she and her husband had taken.

Once again, the vigor of the society was made evident by the election of twelve outstanding candidates, all of whom had made a significant record in academic medicine: Vardaman M. Buckalew, Jr., Robert M. Carey, Michel Chrétien, Robert B. Copeland, Martin Goldberg, S. Richardson Hill, Jr., Ceylon S. Lewis, Jr., John H. Mulholland, Patrick J. Mulrow, John A. Oates, Lynwood H. Smith, and W. Anderson Spickard, Jr. Sir John W.H. Butterfield was elected to honorary membership.

A memorial was presented by Edward Rose for Richard Arminius Kern, one of the oldest members of this Association, who had been, over the years, a most effective contributor to its deliberations. Kern received his medical degree in 1914 from the University of Pennsylvania, and took his residency training at the Hospital of the University of Pennsylvania. He continued on the staff there and rose progressively to the position of professor of clinical medicine in 1946. In that same year, he was appointed chairman of the department of medicine at the Temple University School of Medicine. Kern had a very distinguished record in

the U.S. Navy during World War II and maintained an interest in the activities of the Naval Medical Service, remaining active in the Naval Reserve after World War II. His career in the American College of Physicians was distinguished, and he served as president of that organization. For many years he edited the *American Journal of The Medical Sciences* and was author or co-author of 132 articles during his active years in medicine. A superb teacher and clinician, fluent in five languages, an important contributor to the fields of allergy and hypersensitivity, he was illustrative of those statesmen-like clinicians who have added so much to the prestige of the Climatological Association.

On the scientific program, Robert G. Petersdorf and Eric Larson revisited fever of unknown origin, a follow-up of a much earlier paper on this subject that Petersdorf had written in collaboration with Paul Beeson. His presentation here brought the subject up-to-date and showed the different disease patterns that are now brought to the attention of the physician in patients with unexplained fever. Again, in addition to an excellent group of scientific papers, there were a number relating to medical education, certification and problems relating to clinical research—all given by members who had had a distinguished experience in these aspects of medicine.

The necessity of getting the history of the organization to the printer before the ninety-sixth meeting prevents the inclusion of a description of those proceedings in this volume. However, this meeting was under the chairmanship of a distinguished American medical statesman, Dr. Robert J. Glaser of Menlo Park, California who was ably assisted by two vice-presidents of high academic caliber, Richard W. Vilter of Cincinnati, Ohio and Ralph Tompsett of Dallas, Texas.

Fortunately, there was time to include a group photograph taken at that meeting (Fig. 35), thus extending our record of this Association by visual means from the first group picture taken in Richfield Springs, New York in 1894 up to the ninety-sixth meeting at the Southhampton Princess in Bermuda in October 1983.

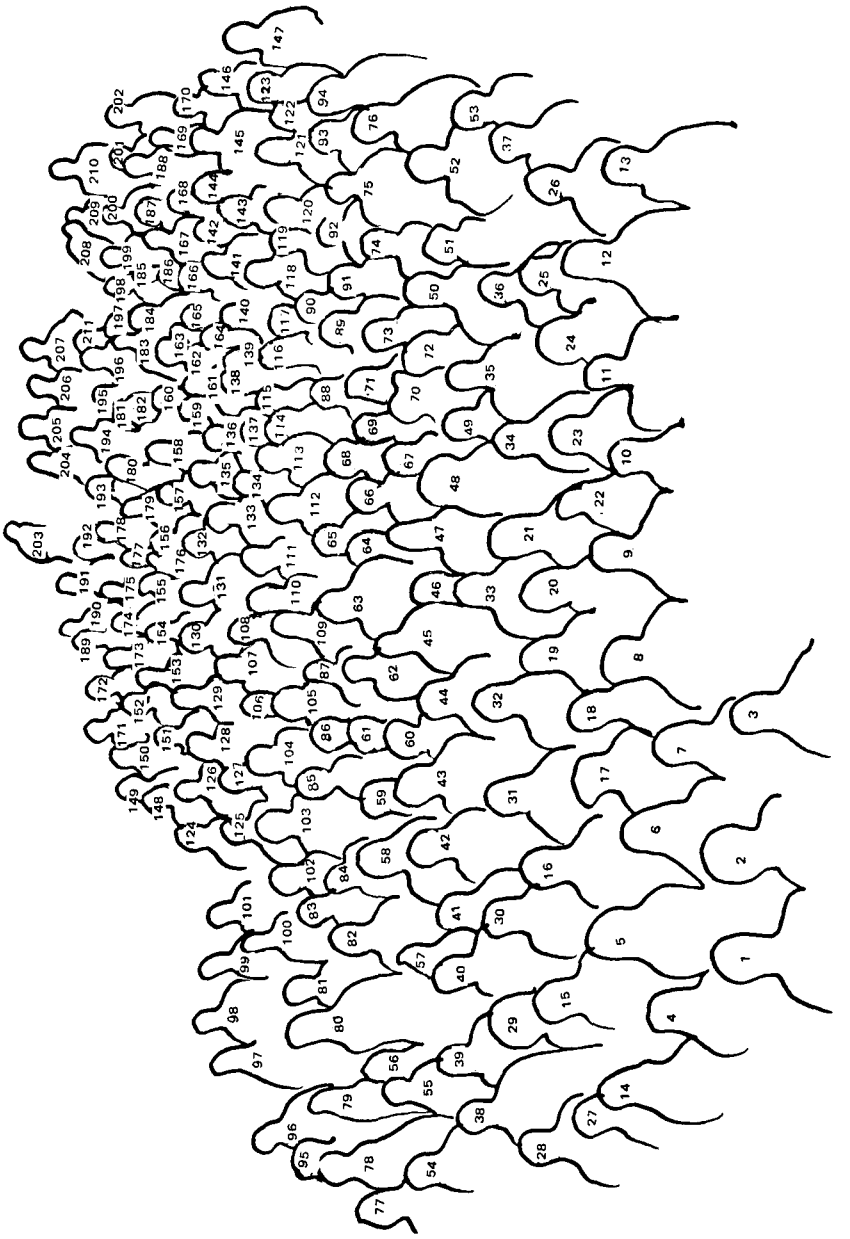

FIG. 35. Members of the American Clinical and Climatological Association, Bermuda, October 23–26, 1983 1- Richard Ross, 2- Boo Ross, 3- Sue Vilter, 4- Lewis Flinn, 5- Marge Lewis, 6- Ralph Tompsett, 7-Richard Vilter, 8- Carol Johns, 9- Richard Johns, 10- Helen Glaser, 11- Robert Glaser, 12- Nicholas Christy, 13- Beverly Christy, 14- Mimi Griner, 15- Paul Griner, 16- Ceylon Lewis, 17- Gleaves James, 18- Thomas James, 19- Allan Friedlich, 20- Barbara Friedlich, 21- Mrs. Thomas Barnett, 22- Lorraine Sanford, 23- Jay Sanford, 24- Ann Wood, 25- J. Edwin Wood, 26- Joan Choppin, 29- Babs Gamble, 30- John Gamble, 31- Fran Kaye, 32- Priscilla Kaye, 33- Thomas Barnett, 34- Jo Fallon, 35- Richard Reitemeier, 36- Patsy Reitemeier, 37- Purnell Choppin, 38- Theodore Woodward, 39- Celeste Woodward, 40- Ethel VanderVeer, 42- Joseph VanderVeer, 43- Calvin Kay, 44- Raymond Randall, 45- Brenda Thomas, 46- Jessie Hook, 47- Edward Hook, 48- Harold Fallon, 49- Eloise January, 52- Patrick Mulrow, 53- Jacqueline Mulrow, 55- Paul Lacey, 56- Robert Carey, 57- Mrs. William Blackard, 58- Anderson Spickard, Jr., 59- Bobbie Rogers, 62- William Thomas, 63- A. McGehee Harvey, 64- Alfred Bollet, 66- Mrs. Alfred Bollet, 67- Robert Whalen, 68- Anne Hunter, 69- Mrs. Munsey Wheby, 70- Mrs. Robert Whalen, 71- Annelies Atchley, 72- Lewis January, 73- Munsey Wheby, 74- Virginia Calkins, 75- Evan Calkins, 76- Tabb Moore, 77- Peg Bondurant, 78- Jane Crofford, 79- Sally Cahill, 80- Oscar Crofford, 81- Hamet Mohler, 83- Lynwood Smith, 84- David Rogers, 85- Mrs. Lynwood Smith, 86- Patricia Toole, 87- James Toole, 88- Tom Hunter, 89- William Atchley, 90- Kits Culver, 91- Perry Culver, 93- Mrs. Elliott Middleton, Jr., 94- Elliott Middleton, Jr., 95- Micheline Chrétien, 96- Michel Chrétien, 97- George Cahill, 98- Edwin Bransome, 99- Janet Bransome, 100- Daniel Mohler, 101- Franklin Paddock, 102- Nan St. Goar, 103- Walter St. Goar, 104- Stewart Wolf, 105- Virginia Wolf, 106- Helen Gottschalk, 107- Carl Gottschalk, 108- Robert Waldman, 110- Joseph Johnson, 112- Edward Huth, 113- Judy Johnson, 114- Vardaman Buckalew, Jr., 115- "E" Harvey, 116- R.C. Tilghman, 117- Mimi Tilghman, 118- Gloria Warren, 119- Leonard Eliel, 120- Kathie Southworth, 121- Marion Phinney, 122- Arthur Phinney, 123- Marion Goldberg, 124- Marion Norman, 125- Dudley Rochester, 126- Philip Norman, 127- Louis Rochester, 128- Oscar Thorup, 129- James Haviland, 130- Marion Haviland, 131- St. George Tucker, 132- Mary Tucker, 133- Robert Salassa, 135- Betty Earle, 136- Peg Carroll, 137- Sue Hornick, 138- Richard Hornick, 139- Dee Hildreth, 140- James Warren, 141- David Challoner, 143- Jackie Challoner, 144- Max Michel, 147- Martin Goldberg, 148- Charles G. Cobbs, 149- Nicholas Fortuin, 150- James Allen, 151- Anita Cobbs, 152- John Mulholland, 153- Stuart Bondurant, 154- Meredith Oates, 155- Oglesby Paul, 157- David Earle, 159- Mrs. Harper Hellems, 160- Mrs. Frank Brooks, 161- Harper Hellems, 164- Eugene Hildreth, 165- Janet Hill, 166- S. Richardson Hill, Jr., 167- Robert Austrian, 168- Mrs. Laurence Early, 169- Truman Schnabel, 170- Laurence Early, 171- Sally Flinn, 172- Rosie Moore, 173- Parksie Mulholland, 174- Gottlieb Friesinger, 175- Michael Criley, 176- John Oates, 177- Mary Ellen Criley, 179- Anne Sinclair-Smith, 180- Bruce Sinclair-Smith, 183- Irving Wright, 184- Lois Wright, 185- Peg Bearn, 186- Bobbie Austrian, 187- Sandy Dexter, 188- Lewis Dexter, 189- Beverly Mason, 190- Robert Mason, 191- Claire Allen, 192- Janet Friesinger, 193- Calhoun Witham, 194- Edward Rosenow, 195- Esther Rosenow, 196- Joseph Reeves, 198- Alexander Bearn, 199- Walter Palmer, 200- John Sessions, 201- Mrs. John Sessions, 202- Walter Palmer's daughter, 204- Cissy Futcher, 205- Hadley Conn, 207- Palmer Futcher, 208- Hamilton Southworth, 209- Edward Nichols, 210- Bobbie Nichols, 211- Betty Conn. No less difficult than identifying shadowy figures in old pictures is matching the names of members and wives to the 211 faces in this recent group photograph. Several members and their wives have had a hand in contributing to the figure legend: We did our best. Nevertheless, the author's apologies are extended to anyone who is unidentified or, worse yet, identified incorrectly.