

## Chapter 4

### THE SECOND DECADE: 1894-1903

#### THE ELEVENTH ANNUAL MEETING

The eleventh annual meeting was held in Wormley's Hotel in Washington, D.C. from May 29 to June 1, 1894. Andrew H. Smith of New York gave the Presidential Address, entitled "Alimentation in Pulmonary Diseases." The primitive state of knowledge of the digestive process at that time is embodied in the following statement from his address: "The products of digestion when received into the circulation are not blood. They represent neither serum nor corpuscles; they are, in fact, dead matter, requiring to be vitalized by the process of assimilation before they become a part of the living blood. Of the manner in which this change takes place we know almost nothing."

Andrew Heermance Smith<sup>1</sup> (1837-1910), for more than 50 years a practitioner of medicine in New York City, was born in Saratoga County, New York on August 17, 1837. He was educated at Union College and the College of Physicians and Surgeons where he took his M.D. in 1858. He was physician to St. Luke's and Presbyterian hospitals and surgeon to the Manhattan Eye, Ear and Throat Hospital. Smith was president of the New York Academy of Medicine in 1903-04.

The Presidential Address was followed by a paper on "The Ratio Which Alimentation Should Bear to Oxygenation in Disease of the Lungs," by Boardman Reed of Atlantic City. It was his thesis that when the intake of oxygen is large, as occurs in the case of robust persons who are exercising actively in the open air, it is manifest that a maximum amount of food will be demanded and can be safely given. When, on the other hand, a patient has one or even both lungs crippled by disease, leaving him as often happens only one-half or one-third his normal breathing power, and when the patient is moreover entirely at rest, being confined to bed in a close, poorly ventilated room, his consumption of oxygen is relatively very small. The amount of food that he can digest and thoroughly oxidize into a nutritive pabulum for the uses of the economy is very much less.

Several papers concerned various aspects of the prophylaxis and treatment of pulmonary tuberculosis, but the remaining papers covered a wide range of subjects. Other topics included a report of cases of chronic heart disease treated by the Schott method of baths and gymnastics, an early program for the controlled exercise of cardiac patients; pathological conditions of the heart in diabetes and their relations to diabetic coma; a new and distinguishing sign of latent aneurysm of the aorta, and a report of three cases of beriberi.

## THE TWELFTH ANNUAL MEETING

The twelfth annual meeting was held on June 13 and 14, 1895, at Hot Springs, Virginia, with Dr. S. E. Solly<sup>2</sup> in the chair. At this meeting, Guy Hinsdale succeeded James B. Walker as secretary-treasurer, serving until 1918.

A handsome Englishman, Solly had arrived in Colorado Springs in 1894 and had quickly become a significant force in the community. He glowingly described the mineral springs of the area, one being suitable for derangement of the liver and spleen, another for biliousness and hemorrhoids, and a third for alcoholism and chlorosis.<sup>3</sup> Solly published a book on medical climatology in 1897.<sup>4</sup> Solly's later paper of 1902 pointed out that there were no sanitariums in Colorado until just before the turn of the century.<sup>5</sup> The high-altitude cure consisted mainly of just living in the area, in boarding houses or in hotels, or in wagons and tents in the countryside, in line with one's economic status.

A resolution was offered on the death of Dr. Alfred L. Loomis, one of the Association's outstanding members and its first president (See p. 34). A second resolution offered by Frederick I. Knight was also unanimously adopted: "Whereas, since tuberculosis has been demonstrated to be a communicable disease, it has become doubly desirable that hospitals for the reception of the poor afflicted with this disease should be established. Resolved, that the American Climatological Association recommend the establishment of such hospitals in every State, not only for the relief of great suffering attending this disease among the poor, but also as a protection of the community against its spread."

The Committee on Health Resorts, through its secretary, presented its report, which is printed in full in this volume. The chairman of the committee was Vincent Y. Bowditch. In discussing the report, R. H. Babcock said: "As a member of the Association, I should like to have data furnished by the Committee with regard to resorts suitable for cardiac patients. It has been quite a question with me many times to decide where to send patients with heart disease. I should like information concerning the interior of Florida and Georgia particularly, and to learn of places which are not frequented by tuberculous patients. I do not like to send patients with heart disease where tuberculous cases abound. It seems as if the attention of physicians has been given to the great army of consumptives, to the apparent neglect of that large contingent of other patients who require removal to a salubrious climate."

The visit to Hot Springs gave the Association the opportunity to see the famous Warm Springs and the Healing Springs. On the day after the meeting, through the courtesy of Mr. H. W. Fuller, General Passenger Agent of the Chesapeake and Ohio Railway, the Association visited the Natural Bridge of Virginia and other points of interest.

The president gave his address on "The Principles of Medical Climatology," in which he reviewed the field in a very systematic fashion. Following this he opened the scientific program with a paper on "The Influence of Heredity Upon the Progress of Phthisis." The new secretary, Guy Hinsdale, then talked about "Recent Measures for the Prevention and Treatment of Tuberculosis." A review of the extensive provisions for tuberculous patients abroad showed how far behind America was in the systematic care of this large class of sufferers. He noted that the Adirondack Cottage Sanitarium, run by Dr. Trudeau, had just completed its tenth year. The annual report stated that from 20 to 25 percent of the patients were apparently cured after a prolonged residence. A "cure" was indicated by the absence of the rational signs of pulmonary tuberculosis and the bacilli in the expectoration for three months or more, or the absence of any expectoration at all; any abnormal physical signs were interpreted as indicative of a healed lesion. At that time this was still the only institution in America strictly built on the cottage plan. Hinsdale then proceeded to list other sanitariums which were either on the drawing boards or had recently come into existence. He also discussed the activities of the Society for the Prevention of Tuberculosis and its efforts to place tuberculosis on the list of reportable diseases, as well as efforts to enact laws to secure the exclusion of the meat and milk of tuberculous animals from the market. He discussed further the attempts of the Society to establish municipal tuberculosis hospitals, as well as state-run hospitals in a favorable elevation in the mountainous portion of Pennsylvania. It was his feeling that more societies for the prevention of tuberculosis should be organized, and that there was a need to organize and maintain special hospitals and cottage sanitariums for tuberculosis. The first step would be to find the localities where medical measures would receive the greatest aid from the natural resources of air, altitude and sunlight.

The early stage of scientific knowledge at this period was revealed in a paper by Richard C. Newton of Montclair, New Jersey, who reported observations appearing to establish the aerial transportation of malarial germs. Thomas D. Coleman, in discussion, felt that transmission by means of air was comparatively rare when compared with the transmission of the disease through drinking water. He thought that in many instances in which the infection was supposed to have taken place through the medium of air, the sources of the drinking water were not sufficiently considered. He stated that in certain regions of Georgia, with which he was acquainted, malarial regions had been entirely transformed by the introduction of artesian wells. He knew of two plantations where it was almost impossible for white families to live before the introduction of artesian well water for drinking purposes. The blacks persisted in

drinking the surface well water and suffered greatly from malaria. In the white families using artesian water, malaria had been absent for a number of years.

#### THE THIRTEENTH ANNUAL MEETING

The thirteenth annual session was held at the Laurel-in-the-Pines, Lakewood, New Jersey, on Thursday and Friday, May 12 and 13, 1896. The Presidential Address, entitled "Some of the Difficulties of Climato-therapy," was given by James B. Walker. Dr. I. H. Platt of Lakewood welcomed the group to this popular health resort, which he stated was at the center of the largest population density in the country — namely, midway between Philadelphia and greater New York. It was absolutely free of malaria; in the midst of a pine belt on sand of about 700 feet in depth, it was thus free from soil or moisture. The low degree of atmospheric humidity made the days warmer (the time of most importance to invalids), and the nights cooler than those in New York and Philadelphia. He indicated that Lakewood was growing less popular as a health resort for the very sick and more popular as a pleasant resort for the tired or convalescent; and that the benefits gained by those in the incipient stages of consumption were very satisfactory. He also commented on the artesian wells, which furnished pure water, and on the method of sewerage disposal that emptied waste into the river about a mile below the town.

The program continued to be dominated by papers discussing climate in various parts of the country and the influence of climate on a variety of disease states. There was an extensive symposium-like discussion on the present treatment of hemoptysis.

The Association was notified of the formation of a similar Association in England during the past year under the title "The British Balneological and Climatological Society," the president of which was Henry Lewis of Folkestone, England. It was proposed that a committee be appointed by the president to represent the Climatological Association in opposing a bill pending in Congress to prohibit vivisection or animal experimentation in the District of Columbia.

The members of the Association and the ladies accompanying them attended a luncheon at the Ocean County Hunt and Country Club at the invitation of Dr. and Mrs. I. H. Platt. About 60 guests were present. After the luncheon, Dr. Platt took the members for a drive through Pine Park and around picturesque Lake Carasaljo.

#### THE FOURTEENTH ANNUAL MEETING

The fourteenth annual meeting of the Association was held in Washington, D.C. in 1897, in connection with the Fourth Congress of American

Physicians and Surgeons. It was at this meeting that the Council recommended that the constitution be changed to allow the election of honorary members, the number of which would not exceed 25. At this time, there were 121 members of the Climatological on the active list, including three honorary members.

The Presidential Address was given by E. Fletcher Ingals<sup>6</sup> of Chicago whose topic was "The Antiseptic Treatment and the Limitation of Climatic Treatment of Pulmonary Tuberculosis." The program was, on the whole, a very uninspiring one, concerned mainly with the climate and its effect on various types of disease, with a few papers on treatment such as "The Salicylate Treatment of Hemoptysis" and "Calomel as a Curative Agent in Diphtheria." "Turpentine as a Remedial Agent" was discussed by James B. Walker and "The Treatment of Gout by Natural Mineral Waters" by Charles C. Ransom of New York.

Ingals, in his Address, pointed out that 25 years ago there were a few, more or less noted, health resorts in the country, where invalids repaired of their own volition, or were occasionally sent by the few physicians familiar with the locality, but that numerous places where invalids may now obtain satisfactory accommodations in the best atmospheric conditions were unknown. "That the members of our Association have done much in searching out the more valuable resorts and in securing suitable accommodations for patients cannot be gainsaid, and that we have correspondingly added our share to the great work of prolonging human life and mitigating suffering, no one can doubt, but that very much is yet to be learned, that the deductions from our observations are still in many instances crude, and that we have often been too enthusiastic in our hope for individual localities, cannot be denied; yet, as a rule our members have been reasonably conservative in their estimates of the value of climate and have patiently and conscientiously studied and labored for the advancement of science and the benefit of their patients." In this address Ingals also strongly endorsed the value of antiseptics in the treatment of phthisis.

#### THE FIFTEENTH ANNUAL MEETING: THE INTRODUCTION OF X-RAYS

The fifteenth annual meeting was held on May 4, 1898 in Bethlehem, New Hampshire, under the presidency of Edward O. Otis.<sup>7</sup> Otis, in his Presidential Address, gave an excellent historical vignette of Auenbrugger and Laennec, the discoverers of percussion and auscultation.

The highlight of this meeting was the first discussion before the Association of the clinical uses of the "roentgen light," by Francis H. Williams of Boston, a pioneer in the application of this new technique in the United States. Williams had been invited by the president to

present this subject and he elected to make a general statement of the medical applications of x-rays, rather than limiting his discussion to their use in pulmonary tuberculosis. In this paper, he gave the results of clinical observations on his own patients, in order to emphasize ways in which an x-ray examination might corroborate other evidence or assist the physician to an earlier, or a more correct, diagnosis. Up to that time x-rays had been used mainly to detect foreign bodies and changes in shape and composition of bones (as in fractures, dislocations, necrosis, tuberculosis, osteosarcoma, deformed pelvis, rickets, and osteomalacia). They had also made possible the demonstration of gouty deposits about the joints as distinguished from rheumatoid arthritis. Williams emphasized that this new method of examination required large and expensive apparatus as well as experience. He stated: "The x-rays do not burn, and there need be no fear of injury from the accompanying electrical discharge to any individual if the examinations are properly conducted and simple precautions are taken. At the Boston City Hospital I have made about 2,000 x-ray examinations, and no one has received any injury or even inconveniences from them. It is easy to burn the fingers if they are put too near a candle, but it is not dangerous to read by its light.

"This new method of examining our patients has now passed the stage of mere interest and novelty, and in its own special field, if suitable apparatus is used, can be counted among our trustworthy aids to diagnosis."

There was a very lively and prolonged discussion of this interesting paper. Dr. J. E. Stubbert made the following comment:

The doctor referred to someone considering the examination by x-rays a joke; I have gone through the same experience. I remember Dr. H. P. Loomis once came to Liberty and told me he did not believe in the x-rays at all. I brought in a case which neither of us nor my house physician had seen before. I asked Dr. Loomis to examine the case, and he diagnosed it as consolidation of the right apex, with beginning of softening and some infiltration in the lower lobe. He made the rather significant remark that he might not have a cavity, but was beginning to excavate. I then examined the patient and agreed with Dr. Loomis' diagnosis. I sent for the house-doctor and he made an x-ray examination; after a moment he said, "This man has consolidation of the right apex, he has infiltration of the lower portion of the lung, and while he may not as yet have a cavity, he is going to have one in a short time." Dr. Loomis said: "Well, if it can be diagnosed in that way I will have nothing more to say," and he is now a convert. There is no doubt in my mind that we can diagnose (clinically), especially in thin subjects, very slight infiltrations at the apices of the lungs. We all know how difficult it is to educate our ears sufficiently to distinguish indistinct signs, but with the x-ray the very slightest infiltration is shown in the form of a slight haze.

Stubbert went on to say: "I do not know exactly how many hospitals have x-ray machines; I am told that at least 13 in New York have them. We have them in Boston and they are also to be found in Philadelphia,

Baltimore, Chicago, St. Louis, San Francisco, and probably in all of the large cities in the country.”

The state of therapeutics was again highlighted with a discussion by Abraham Jacobi of the use of ergot in chronic malaria. Evidence that the Climatological was at the cutting age of the social mores of the country was a paper by William Duffield Robinson of Philadelphia on “Climatology of Nudity: Partial and Complete.”

The minutes contained a memorial sketch of William Pepper, one of the founders of the Climatological and its president in 1886. Born on August 13, 1843, he was the son of Dr. William Pepper, former professor of medicine at the University of Pennsylvania. Pepper had a deep and lasting interest in climatology. He had prepared as long as 20 years previously most comprehensive plans for work in this department of medical science. He had arranged to have data collected from each county in Pennsylvania that would throw light upon the climate of its region, including a study of the atmosphere, the soil, the vegetation, the animal life, and all other physical matters relating to climate. Another member, Dr. Daland, published with Pepper the results of many of their conjoint investigations. Pepper also engaged in an exhaustive study of the mineral springs of America. One of his most important contributions was his appreciation of the relation of pathology to clinical medicine, which led to the founding and endowment of the William Pepper Clinical Laboratory at the University of Pennsylvania for the purpose of studying the pathologic problems in clinical medicine. In 1870 Pepper was made lecturer in clinical medicine and in 1874 professor of that branch. From that time forward he threw his whole energies into clinical medicine and up to the time he was elected provost of the University of Pennsylvania, pursued his studies with energy and ability. His lecture room was crowded, and there was always a waiting list for his private course in physical diagnosis. In 1884 appeared the classic treatise *A System of Medicine*, which he edited, and in 1890 he gathered around him a number of associates who contributed to his last systematic work, *The Practice of Medicine*.

In 1870 events of great significance aroused in the late Dr. Pepper traits dormant because of the lack of opportunity to display them. The removal of the university to West Philadelphia and the recognition by Agnew, Pepper, Wood, Norris, and Tyson of the necessity for a hospital in the normal plan of a medical school called for new work. As chairman of the Building Committee, by his personality, his tact, and his force, he managed legislative bodies, laid the wealthy under tribute, and organized the alumni to potent work. In 1876 he was medical director of the Centennial Exposition, for the management of which he received a Knighthood from the King of Sweden. The cause of medical education

found in him a tireless champion. He reorganized entirely the University of Pennsylvania and established five new and most successful departments. He threw his whole soul into the university extension movement, was the first president of the local, and later of the national, society. He also was very active in a number of community efforts relating to museums and other societies. He became a vice-president and a leading spirit of the American Philosophical Society. He assisted in the organization of the Congress of Physicians and Surgeons. He was also one of the founders of the Association of American Physicians and later president of that distinguished body. He died July 18, 1898 of angina pectoris.<sup>8</sup>

In the afternoon at 2 o'clock the members and the ladies accompanying them, through the courtesy of Dr. C. F. McGahan, enjoyed a drive to Franconia and the Profile. After returning to Maplewood, the Association was convened at 8:30 p.m.

#### THE SIXTEENTH ANNUAL MEETING

The sixteenth annual meeting was held at the New York Academy of Medicine on May 9, 1899, under the presidency of Beverley Robinson<sup>9</sup> of New York. A luncheon was served in the Academy between sessions and a smoker was held at Delmonico's, both tendered by the New York members. The Association dinner was served at the Hotel Manhattan. A trip was made to visit the Loomis Sanitarium at Liberty, New York, a special train being provided by the New York, Ontario, and Western Railroad.

President Robinson's address on "The High Aims of the Physician" tells us much about the state of medical science at this time and of his feelings about the qualities of a good physician. He quoted from Sir Dyce Duckworth's Harveian oration on "The Influence of Character and Right Judgment in Medicine," delivered before the Royal College of Physicians of London on October 18, 1898: "We are perhaps too much disposed to commemorate the scientific achievements of our great men, but let us not be unmindful of their characters. We know that genius is not always coincident with the highest moral or spiritual perfection, but when both these qualities are graciously combined in anyone we feel that we are in the presence of a truly great man—of one who becomes a personage and a power for good in his day and generation. In such a profession as ours we can never afford to lose sight of the preponderating influence of character in all who join our ranks and have to minister to every grade of our common humanity." In commenting on the recent scientific activity in the field of infectious diseases he said:

In many diseases of an infectious type the role played by bacteria, it seems to me, has been misinterpreted. They, in themselves, are not the causative agent of these



maladies, but are rather a frequent accompaniment of the septic process and may act as mere carriers of contagion. It is not difficult to understand, therefore, that when once the septic action is begun by the presence and influence of a poisonous principle of the contagious or infectious disease, such change may take place in the liquids and tissues of the body as to promote the rapid production and development of different forms of bacteria, with more or less characteristic features. . . .

It behooves us, in this as in other difficult or problematical subjects of medicine, to liberate ourselves from preconceived or too absolute theories which impede our progressive march in the path of exact knowledge. The following conclusions taken from the address of Charlton Bastian, in which he attempts to refute the too exclusive views of the upholders of the germ theory of zymotic diseases, contain even at the present day some wholesome truths: "1) The virus or contagium of some of these diseases, whatever it may be, does not exhibit the properties of living matter; 2) There is the extreme improbability of the supposition that this whole class of diseases should be caused by organisms known only by their effects; 3) The facts of the sudden cessation, periodical visitation, and many of the other phenomena of epidemics, however difficult they may be to explain upon any hypothesis seem to pose almost insuperable obstacles to the belief that living organisms are the causes of such epidemics of specific contagious diseases."<sup>[10]</sup>

To Bastian's conclusions, promulgated 24 years ago, I would now add citations from the Huxley lecture on "Recent Advances in Science," by Professor Rudolph Virchow delivered last autumn in London on a memorable occasion. "Virchow writes:<sup>[11]</sup> 'With the discovery of parasitic animals conjecture became fact, and nothing was easier than to generalize this fact and assume the presence of independent organisms in each contagious disease. . . . It may be said that the contagious nature of disease shows suspicions of bacterial origin but it should not be simply called that, although it allows the conscience to sleep. Some of the most important contagious diseases have succeeded in resisting the struggle to find in them a parasitic contagion. For example, many have been the sanguine hopes of finding the parasite of syphilis, and as many have been the failures; the coccus of gonorrhoea alone has been discovered, the bacterium of syphilis remains a desideratum. You will remember the certainty with which it was expected that a parasite was the causal agent of variola—more than one was found, but none pathogenic. In hydrophobia all appearance seemed to promise that it would prove to be a microparasitic disease. Its contagiousness is undoubted; the vaccine has been prepared and yet no one has been able to cultivate a specific bacillus. . . .'"

Thus, it was a heady scientific environment in which the members of the Association tried to make progress and to understand the new and important areas of science that were advancing at such a rapid pace.

In an interesting paper by S. G. Bonney, the early diagnosis of pulmonary tuberculosis was discussed. He pointed out that thousands of lives were being sacrificed annually because of mistaken or delayed diagnosis. Early diagnosis thus assumed a position in the general consideration of tuberculosis of vastly more practical importance than climatic change, general management, or prophylaxis. Recent investigations with the roentgen rays disclosed their utility for diagnostic purposes in thoracic disease, and due recognition was given to the diagnostic value of the tuberculin reaction. Neither of these, however, by reason of the necessary restrictions upon their employment were ordinarily within the

immediate reach of the general practitioner. Bonney went on to state that it is profitable to review the well-known and perhaps old-fashioned principles of diagnosis with the aid of the stethoscope and the thermometer, the careful and painstaking application of which are so frequently overlooked. Some of the errors that he pointed out were: 1) delay in instituting a physical examination until long after the development of pronounced symptoms; 2) failure to examine on the bare skin, the presence of clothing effectually preventing any approach to accurate results; and 3) neglect in examining the entire chest. He severely criticized failure to utilize cough preceding forced inspiration in eliciting the presence of slight moisture in the finer tubes, among other things. He did not, however, stress the presence of bacilli in the sputum, which Frederick I. Knight of Boston pointed out were in his experience almost uniformly present even in early cases. With its emphasis on the old methods of diagnosis, this paper reflects the transition period between the old and the new, which was dependent on x-ray and laboratory procedures just being instituted.

In the next paper Edward O. Otis made notes on the tuberculin test. He suggested that further evidence was needed to establish its exact position as a diagnostic method, but he felt that it was successful in the majority. Its rival, he pointed out, was the x-ray, but that required an expert and an expensive apparatus which at that time limited its use to the few.

A most important paper was "Roentgen Ray Examinations in Incipient Pulmonary Tuberculosis," by Francis H. Williams of Boston. Williams emphasized that the x-ray in many of his cases gave warning of tuberculosis before any departure from the normal was obtained by auscultation and percussion. He urged the adoption of this method to aid in the early diagnosis of pulmonary tuberculosis, since it gave the best opportunity of arresting the disease and teaching patients simple precautions that would prevent spread of the infection to others.

#### THE SEVENTEENTH ANNUAL MEETING

The seventeenth annual meeting of the Climatological was held at the Arlington Hotel in Washington, D.C. on May 1, 1900, in connection with the Fifth Congress of American Physicians and Surgeons. The widening scope of the Association in terms of membership and interest was evidenced by the presence in the chair of Dr. Abraham Jacobi,<sup>12,13</sup> a distinguished pediatrician from New York whose Presidential Address was entitled "Functional and Organic Heart Murmurs in Infancy and in Childhood."

The son of one of the most revered members indicated his motivation to progress with the times when H. P. Loomis discussed "Some Personal

Observations on the Effect of Intrapleural Injection of Nitrogen Gas in Tuberculosis." This technique, which had been introduced by Murphy in this country a short time before, was gaining wide usage. In the discussion of Loomis's paper, Charles Denison of Denver noted that he had described before the Colorado State Medical Society about a year before a method of strapping the chest with adhesive plasters. The strips of plaster, one from the back and one from the front of the chest, were placed over the affected side of the thorax, crossing each other in the axillary region and then drawn tightly to the opposite shoulder where they were fastened to a collar. By this simple method he believed that the affected lung could be placed entirely at rest, doing away with the necessity of intrapleural injections. Most of the members in the discussion indicated that their limited experience with pneumothorax had been beneficial.

In a discussion of the value of the tuberculin test, J. M. Anders concluded that if the use of tuberculin as a therapeutic measure in tuberculosis was abandoned (since this rests upon a misconception of the nature of the agent), much of the opposition to its invaluable aid in the diagnosis of latent and incipient cases (notably the tuberculin test) would be removed. This paper excited a very extended discussion. Some had not given up the belief that tuberculin provided a treatment for the disease. Arnold Klebs pointed out that one of the difficulties was that there was no standard preparation of tuberculin so that results could be compared.

#### THE EIGHTEENTH ANNUAL MEETING

The eighteenth annual meeting was held in Niagara Falls on May 30, 1901, under the presidency of R. H. Babcock<sup>14</sup> of Chicago who, in his Presidential Address, discussed "The Limitation of Drug Therapy." There were 39 papers published in the *Transactions* for this year, almost all of which dealt with some aspect of climatology or of tuberculosis. There was certainly no evidence in this program of a broadened interest on the part of the Association.

The minutes reported the death of one of the most distinguished of the honorary members, Dr. Alfred Stillé<sup>15</sup> of Philadelphia, who died on September 24, 1900 in his 87th year. After graduation from the University of Pennsylvania in 1836, he served as resident physician in the Philadelphia and Pennsylvania hospitals, then went to Paris, with George C. Shattuck of Boston, where he came under the influence of the distinguished French clinician Louis. Stillé read a paper in 1832 in which he presented in tabular form the distinctions, clinical and anatomical, between typhus and typhoid fever.

At this meeting, the publication of the *Transactions* was turned over to Messrs. John Bale and Sons and Danielsson, Ltd. of London. Dr.

Septimus Sunderland, a corresponding member who was also an editor of the organ of the British Balneological and Climatological Association, arranged for its publishers to print all the papers of the *Transactions* and the *Journal of Balneology and Climatology* in one volume; the editors of the *Journal* would be allowed to utilize some of the *Transactions's* papers in their publication. The result was that 300 copies of the *Transactions* were secured at a cost of \$220. The preliminary matter was printed in Philadelphia by Mr. William J. Dornan and the volume illustrated, bound, and distributed for an additional expense of \$145, making a total cost of \$365. The secretary recommended a renewal of the plan for another year. What a great pleasure it would be for the current recorder to be able to make such economical arrangements.

Through Dr. Quimby the members were invited to visit the Niagara Falls Power Company's plant and to take the trip around the gorge as the guests of Mr. Rank, first vice-president of the company. This was done on Friday afternoon, it being decided to hold an evening session beginning at 8 o'clock.

#### THE NINETEENTH ANNUAL MEETING

The nineteenth annual meeting of the Climatological was held on June 9 and 10, 1902 in Los Angeles, California, under the presidency of Samuel A. Fisk<sup>16</sup> of Denver, Colorado, who addressed the Association briefly on the various purposes of its existence. An interesting feature of this meeting was the tour that the members of the Association took on their way to the meeting in California. With the aid of the Atchison, Topeka, and Santa Fe Railroad, the Phoenix and Maricopa Railroad, and the Southern Pacific Company, an itinerary was arranged, the members traveling in a private car. Leaving Chicago on May 27, they had the pleasure of an interesting and instructive trip through Kansas, Colorado, New Mexico, Arizona, California, and Utah, and many returned via Oregon, Washington, Puget Sound, and the Dominion of Canada. As might have been expected from the presence of climatologists and a representative of the Weather Bureau from Washington, the Association encountered en route what was invariably termed "most unusual weather." Severe floods in western Kansas and eastern Colorado resulted in the destruction of several railroad bridges, enabling members to test during 40 hours of delay the tenacious qualities of Kansas mud and to become familiar with the habits of the prairie dogs and the flora and fauna of the plains. Kansas did not make a favorable impression on the party, either in the matter of soil or rainfall.

The program was filled with the usual plethora of papers on the climate and on tuberculosis. The most interesting, which brought the group back to a greater sense of reality, was the presentation of Henry Sewall (Fig.



FIG. 12. Henry Sewall

12) on "Altitude in Fact and Fancy." Sewall's scientific background made him one of the better-trained members. He had received his Ph.D. in physiology under Newell Martin at the Johns Hopkins University. From there he went to the University of Michigan as professor of physiology, where he remained until he contracted tuberculosis and moved to Denver. His major research contribution was his demonstration for the first time of the concept of specific antitoxins. Sewall pointed out that the clinician is forced to undertake the solution of some of the most complex problems in physiology and pathology while, at the same time, he is almost completely deprived of the most valuable aid to scientific investigation, that of experimental verification. It was not surprising to Sewall, therefore, that in the field of medical climatology the worker is particularly liable to be the victim of the errors to which all original investigators are subject. Chief among them may be inexactness of observations and the interpretation of facts by fancies that lead to some preconceived hypothesis or satisfy some personal desire. The physical data of meteorology

thus become the ornaments of generalizations rather than their foundation. He pointed out that possibly there occurred to each one there present illustrations of such errors of observation or of logic in climatology. Sewall went on to present a very intelligent and interesting analysis of the difficulties involved in interpreting the physical data and their influences on physiological function in man. After Sewall's careful review of the present knowledge of changes in physiological function with altitude, and their effect on cardiac and tubercular disease, the point that he was attempting to drive home promptly emerged in the discussion. Dr. Curtin agreed that cardio-tubercular cases do not generally improve at high altitudes, but he stated categorically—without any evidence—that this was due largely to the influence of altitude on the nervous system.

#### THE TWENTIETH ANNUAL MEETING

The twentieth annual meeting was held in Washington, D.C. on May 12, 1903, in conjunction with the Sixth Congress of Physicians and Surgeons. The meeting was under the presidency of Norman Bridge<sup>17</sup> of Los Angeles, who commented that "we cannot let the good fellowship that belongs to so harmonious a society as ours betray us into dropping behind in the serious work of the organization. It seems to me that we are by the character of our compact under greater temptation to do this than any other of the societies of this congress of science." In looking at the program it is clear that this was happening.

There were no papers on any new and stimulating subjects. Science was beginning to be applied to the study and treatment of disease, but the Association was rather slow to respond. An example was the paper by Charles L. Minor, which offered the cyrtometer as a neglected instrument of pulmonary diagnosis and prognosis. Cyrtometry was simply the method of measuring the horizontal area of the chest by the combined use of a caliper for anterior-posterior diameter from the center of the sternum to the spine, and the use of a lead strip to outline the margins of the chest wall at the same level. The physician could then show that with improvement in the patient's condition, this area increased. Minor's approach seems retrogressive, since several papers on roentgenology of the chest had already been presented at previous meetings. The general caliber of the papers was indicated by that of J. Madison Taylor of Philadelphia on how to postpone the degenerative effects of old age: he recommended a sensible diet comprising mainly bread, milk and fruits, and he said that buttermilk was the best drink, after which came "koumyss" or "zoolak" (which he had known some elderly folk to subsist on almost entirely for years). The new science had obviously not intruded very significantly into the proceedings of the annual meetings of the Association at this stage.