CHAPTER III

The War Years

Mainly because of dynamic action on the part of President-elect Wortley F. Rudd of the Medical College of Virginia, the eighteenth annual meeting of the Academy, which convened at the Virginia Military Institute on May 2–4, 1940, was a momentous one in Academy history.

However, even before Dean Rudd took the floor for his thought-provoking address to the Academy, Dr. Ivey F. Lewis was singled out and given special commendation by the Academy for the effort he had exerted in launching the *Virginia Journal of Science*.[1] Dr. Boyd Harshbarger of Virginia Polytechnic Institute, a president of the Academy (1948–1949) and editor and founder of the *Virginia Journal of Science* (new series), has noted in his manuscript history of the *Journal* that Lewis was "the guiding spirit and drive for this project."[2] The first number of the *Journal* came out in January 1940 as the successor to *Claytonia,* the mimeographed publication of the Committee on Virginia Flora which had already gone through five volumes, its last number appearing in April 1939.[3] Dr. Ruskin S. Freer of Lynchburg College, who became the first editor in chief of the *Virginia Journal of Science,* had been, since 1934, the able director of *Claytonia* and had had as his assistant on that project Lt. Col. Robert P. Carroll of Virginia Military Institute. Carroll was to continue as Freer's assistant in the position of managing editor of the new publication.[4]

Editor Freer, who was also serving as Academy president in 1939–40, announced in the first number of the *Journal* that it was mainly "due to the efforts of Lt. Col. Robert P. Carroll of the Virginia Military Institute" that "the Academy voted to start an official periodical publication." Dean Ivey F. Lewis of the University of Virginia had been appointed chairman of the Publications Committee chosen by President Freer which authorized the printing of the first *Journal.* Freer further explained that the Committee on Virginia Flora "felt that, while its publication was continuing without a deficit, the purposes of the Committee in publishing *Claytonia* could be met as well in the *Virginia Journal of Science,* and the new publication would in addition serve much broader needs." The *Journal,* Freer said, would accept papers from all sections of the Academy; and its editorial board, then being planned, was to include Dr. Miller and representatives from the various sections. The first number of the *Journal* dealt entirely with botanical material as the only manuscripts on hand were those that had been submitted for publication in *Claytonia.*[5] In Dr. Jeffers's words, "the *Virginia Journal of Science* was but the expanded and more sophisticated off spring of *Claytonia.*"[6]

At the Council meeting in May the appointments of Professor Freer as editor and Lt. Col. Carroll as managing editor were formally announced.[7] Each section of the Academy was requested to elect a section editor who would sit on the board of the *Journal,* and, in addition, the Academy voted to give the *Journal* $500 a year for the next two years to help the magazine clear the financial obstacles ahead.[8] Unfortunately the *Journal* was unable to meet its financial responsibilities with the $1,000 and was only published until May 1943.

An examination of the papers published in Volume I of the *Journal* reveals that not all sections of the Academy responded to the editor's call for papers. The Engineering, Medical Sciences, and Psychology Sections did not contribute any papers. However, the Chemical Section was responsible for 14 papers; Botany, 9; Geology and Zoology, 4 each; Education, 2; and Agriculture (which was not then a distinct section), as well as Astronomy and Physics (which were usually combined in the Astronomy, Mathematics, and Physics Section), 1 each.[9]

[1] *Proceedings, 1939-1940,* 176.

[2] Boyd Harshbarger, The History of the *Virginia Journal of Science.* 10-11, manuscript in possession of Virginia Academy of Science, Virginia Institute for Scientific Research, Richmond, Va.

[3] Jeffers, History, 79.

[4] Harshbarger, History of *Journal,* 2.

[5] Ruskin S. Freer, "An Announcement," *Virginia Journal of Science,* I (January, 1940).

[6] Jeffers, History, 79.

[7] *Proceedings, 1939-1940,* 173.

[8] *Ibid.,* 194.

[9] Harshbarger, History of *Journal,* 5-6.

Following the announcement of the publication of the *Virginia Journal of Science,* George W. Jeffers of Longwood College and R. C. Berry, State Chemist, proposed the resolution "that the Senior Academy of Science sponsor a Junior Academy of Science, and that the incoming president be empowered to form a committee to work out details."[10] The Academy adopted the resolution committing itself to the formation of a full-fledged junior academy instead of merely seeking junior memberships, which had not been a very successful program up to this time.

Competition for the Jefferson Gold Medal, which had begun in 1936, was discontinued in 1939. Beginning in 1940 the Jefferson Prize was given, as well as the Academy Research Prize—the winning author having his choice of awards.[11]

With all these various events it still appears that President-elect Rudd was the foremost delegate at this convention. Rudd set a precedent in Academy annals by coming before the Academy Conference "to set forth his views about Academy affairs" in the form of a report of the president-elect.[12] Dean Rudd's speech challenged the Academy to find cause for its very existence at this crucial time of international tension; and he offered for consideration certain projects which he judged were worthy of the Academy's attention. In his address, Rudd stressed the fact that "it will not be sufficient that we meet once a year and have a wide variety of papers, however strong they may be. . . . An organization like ours may content itself with that sort of existence for the period of its youth, but will most certainly atrophy if it does not in its maturer years set itself resolutely to definitely constructive tasks that lie naturally within its sphere of influence."[13]

Rudd went on to make several suggestions of consequence. He revived the idea of finding Secretary E. C. L. Miller a permanent assistant. The president-elect was looking for a man upon whose shoulders "will probably fall, ultimately, the ever-increasing responsibilities of directing the affairs of the Academy in the second phase of its history as Dr. Miller has done in its formative years."[14] The Council was authorized to select a permanent assistant; such a person they hoped to find in Sidney S. Negus.[15]

Rudd next sought the approval of the Academy for the formation of a new committee the likes of which the Academy had never before seen. Rudd proposed to appoint a Long Range Planning Committee to be truly a cartographer of the future and not simply another committee to deal with specific issues of the present moment.[16] On a motion by Dr. E. Ruffin Jones, Jr., of William and Mary the Council gave Rudd the go-ahead to form his "long range" committee.[17]

Next Rudd singled out two problems which he considered to be both statewide and justifiably demanding of the Academy's concern. One of these was a lack of vocational training in the high schools of Virginia. Although boys were readily trained for careers in agriculture, Rudd complained that in preparation for careers in industry the State educational program was horribly deficient.[18] Also the new president pointed out that stream pollution should be given greater consideration. With perception Rudd noted: "indeed we venture to assert that it always will be a political matter unless and until some properly qualified and non-partisan group puts it on the proper scientific basis, and working in cooperation with the industrialists, the committees, and the law makers, sees it through to a satisfactory conclusion."[19]

President Rudd's initial comments to the Academy were very well taken. In a month and a half from the time of his remarks France would be tottering on the verge of defeat and no one would be able to call the war in western Europe a "phony war" any longer. A redefinition of values was most certainly at hand; Rudd had voiced the need for the Virginia Academy of Science to do just that.

A special Council meeting, primarily concerned with the not too successful showing of the *Virginia Journal of Science,* was held April 5, 1941, a month in advance of the nineteenth convention. It was generally agreed "that as conducted at present the *Journal,* will eventually bankrupt the Academy"; but, as Secretary Miller noted, "there was less unanimity as to what should be done with it."[20] No final decision was reached; however, the Council voted to send the second $500 grant directly to the printer to help pay the large debt which the *Journal* had run up there.[21]

The annual meeting in 1941 was held in Richmond under the auspices of the Medical College of Virginia on May 1–3. At this meeting the Council adopted

[10] *Proceedings, 1939-1940,* 196-197.

[11] Walter S. Flory, Research Committee History, 13.

[12] *Proceedings, 1939-1940,* 180.

[13] *Ibid.,* 181.

[14] *Ibid.,* 181-182.

[15] *Ibid.,* 194.

[16] *Ibid.,* 182.

[17] *Ibid.,* 194.

[18] *Ibid.,* 183.

[19] *Ibid.,* 183.

[20] *Proceedings, 1940-1941,* 131.

[21] *Ibid.,* 131.

a plan advanced by Dr. Miller which would give the *Journal* one more trial year. There were to be no major restrictions imposed on its management; nevertheless, the magazine was expected to show a marked financial improvement or face discontinuance.[22]

A precedent had not been set in 1940 for the president-elect to address the Academy Conference, for it was the president, Dean Rudd of the Medical College of Virginia, who again stood before the assembled delegates in the spring of 1941. His special point was the challenge which he said faced men of science "to have the courage, and the wisdom, and the devotion to our share of the job in our day and so impress those who are to follow us that there may be no faltering."[23] This theme was not to fall upon deaf ears; one leader after another was to take it up during the trying war years.

Chairman L. C. Bird presented the recommendations of the recently organized Long Range Planning Committee—the most important of which, at the time, was assumed to be the publishing of a monograph on the James River. A letter from Justus H. Cline of Stuarts' Draft to Ivey F. Lewis was the germ from which the ambitious project grew. Mr. Cline wrote that "a monograph on the James River would perhaps appeal to the imagination of Virginians as much as anything the Academy could do. . . . What civilization has done to this wonderful river, which should be the pride of Virginia and the nation," Cline continued in words that were to win the committee's approval, "would certainly be a fine thing for the Academy to find out and tell about. . . ."[24] Subcommittee chairman Marcellus H. Stow of Washington and Lee University picked up the tenor of Cline's letter when he gave his report on the James River project. "Only a project of wide range could elicit the active interest of a body such as the Virginia Academy of Science"; and "by setting up some natural and resourceful feature of the State, with which everyone is already familiar, and which has played a profound part in scientific, economic, romantic, and social life of the State," pointed out Stow, "the worthy aims of the Academy could be accomplished." The Academy "should study the James River Basin," continued the chairman, "as a human habitat and should indicate, wherever possible practical means for improving this human habitat."[25]

The James River Project Committee appointed by the Long Range Planning Committee in 1941 stayed intact until publication of the monograph nine years later. Although new members were added, Chairman Stow had five charter members on his committee: Robert P. Carroll of Virginia Military Institute, Justus H. Cline of Stuarts' Draft, Ivey F. Lewis of the University of Virginia, Foley F. Smith of Richmond, and I. D. Wilson of Virginia Polytechnic Institute.[26]

The Long Range Planning Committee also set up subcommittees concerned with the junior academy and science club work, research, education and publicity, science museum, and finance.[27] Some of these committees were to be quite successful in their future endeavors, but none could rival the committee on the James River project for the spotlight in 1941.

A Forestry Section, presided over at its first meeting by Forest Supervisor John W. McNair of Jefferson National Forest, was added to the Academy in 1941. The section heard 20 papers presented almost exclusively by State and Federal foresters. However, J. B. Grantham of Virginia Polytechnic Institute and Chapin Jones of the University of Virginia, who served as chairman at the second session of the Forestry Section's meeting, were both professors of forestry and presented discussions of their respective forestry departments. The Forestry Section managed another program in 1942, but ceased to be active after that convention.[28]

The war had a great deal to do with the activities of the twentieth annual meeting, which was hastily planned but admirably staged in the city of Roanoke. The very fact that the Academy was meeting in Roanoke reflected the intrusion the war had made on civilian matters. The convention had originally been scheduled for Norfolk; however, "by January even the most enthusiastic of Norfolk supporters were ready to admit that the 'Conscripted City' would not be able to entertain the Academy in May."[29]

It was indeed a wartime convention as President George W. Jeffers of Longwood College noted in his comment to the Academy that "after all this is a war of science. . . . Science can serve by continuing to press forward vigorously with its normal affairs, but at an accelerated pace."[30] Secretary Miller continued in the

[22] *Proceedings, 1940-1941,* 157-158.

[23] *Ibid.,* 137.

[24] *Proceedings, 1941-1942,* 168-169.

[25] *Proceedings, 1940-1941,* 162-163.

[26] Jeffers, History, 128.

[27] *Proceedings, 1940-1941,* 159.

[28] *Proceedings, 1940-1941,* 208.

[29] Jeffers, History, 29.

[30] *Proceedings, 1941-1942,* 152.

same tone and pointed out that one thing which Academy members "can and should do" is register in the National Roster of Scientific and Specialized Personnel.[31]

Dr. Leslie A. Sandholzer of the Public Health Department of Norfolk commented extensively on the wartime activities of the Academy. In part he said, "it is the duty of the Academy, therefore, to make the community aware of its scientific needs in the war effort and to promote a program of scientific endeavor in line with this. Failure to do so can only lead to a lessened efficiency of the national war program." Sandholzer was calling for science to fall into line with its research efforts and noted, to emphasize his point, that "the nutritional value of T.N.T. to alligators is not a war research in spite of the use of high explosive." Then Sandholzer reiterated the theme which Rudd, Jeffers, and Miller had been driving home, and which would continue to recur in Academy thinking for the next three years: "It would seem to be," he said, "in the best interest of society as well as of science for us to plan a war and post-war program of scientific endeavor."[32]

Later Sandholzer suggested that the Virginia Academy of Science establish cordial relations with the large number of scientists stationed in Virginia during the war, and that the Academy make their laboratory facilities available to these visitors.[33] The Academy empowered the incoming president, Marcellus S. Stow of Washington and Lee, to set up a committee, which became known as the Committee on Wartime Activities, to study both present and postwar problems.[34]

In addition to the discussions relating to the impact of the war, President Jeffers reported that in October 1941 the Academy had presented a symposium on "The Value of Scientific Research to Virginia Industry" in a joint meeting with the Virginia Association of Manufacturers at Roanoke. Dr. Sidney S. Negus of the Medical College of Virginia had been in charge of the Academy's presentation.[35] Jeffers was also able to announce that the State legislature had appropriated $5,000 for the publication of the monograph on the James River.[36]

In a complete about-face from what had been decided in 1937, the 1942 Academy convention voted for the Conference to "be given power to dispose of Academy business."[37] Only five years earlier the Conference had been instituted specifically as a discussion meeting. Also at this meeting another new section was added to the Academy—bacteriology.[38] Dr. Leslie A. Sandholzer of Norfolk, a rather conspicuous figure at the 1942 meeting, was chairman of the section. Fourteen papers were presented by scholars from the University of Virginia, Hampton Institute, Virginia Polytechnic Institute, and the United States Public Health Services.[39]

Subcommittees of the Long Range Planning Committee had two major reports to make in 1942. Mr. Hubert J. Davis of Matthew Whaley High School in Williamsburg and chairman of the subcommittee on science clubs and a junior academy reported that the Junior Academy had held its first meeting in May 1941 at George Wythe High School in Richmond at the same time that the Virginia Academy was meeting in that city. However, the American Institute which was to provide $100 for the Virginia science clubs had failed to do so and had informed the Virginia Academy of Science that Science Service and its national organization, Science Clubs of America, was the new group with which to affiliate. The American Institute, it seems, had decided to restrict itself to developing scientific interest solely within New York City.[40] At the meeting of the Council on January 16, 1942 the Virginia Academy voted not to affiliate with Science Service. With both Science Service and the American Institute as sources of financial aid sealed off, it was obvious that the Academy would have to plan well and work quickly if it hoped to save its Junior Academy. E. C. L. Miller had already assumed the duties of Junior Academy treasurer and in January Miss Lena Artz of Arlington was appointed secretary. As Mr. Davis noted, the Junior Academy was actually "begun in earnest" in January 1942 when the Academy realized that the success or failure of the Junior Academy rested squarely upon the shoulders of the Senior Academy.[41]

Chairman Stow, reporting for the Committee on the James River Project, was able to announce that the title for the proposed monograph would be *The James River—Past, Present, Future.* Stow said that Dr. Sidney Negus had prepared in-depth outlines of the planned study which were published in both *Science* and

[31] *Proceedings, 1941-1942,* 154.

[32] *Ibid.,* 193-194.

[33] *Ibid.,* 193-194.

[34] *Ibid.,* 198.

[35] *Ibid.,* 150.

[36] *Ibid.,* 152.

[37] *Ibid.,* 196.

[38] Jeffers, History, 34.

[39] *Proceedings, 1941-1942,* 204-208.

[40] Jeffers, History, 82-83.

[41] *Proceedings, 1941-1942,* 169-171.

the magazine of Virginia, *The Commonwealth*, and that the outlines had "received exceptionally favorable comment from numerous sources." With a great deal of optimism and enthusiasm, authors for the various chapters, as well as deadline dates for copy, had been announced during the past year; however, manuscripts, as Dr. Stow observed, were slow to come in. One individual, however, was "unique in his interest in the James River Project." Mr. Justus Cline, who had first proposed the endeavor, was singled out by Stow as a man without whom "we would have been unable to do what little has been done on the Long Range Project." [42]

[42] *Proceedings, 1941-1942,* 180-182.

The central location of Richmond, not to the state of Virginia but to the members of the Virginia Academy of Science, made it the scene of not only the twenty-first but also the twenty-second, twenty-third, and twenty-fourth annual meetings of the Academy. Wartime gas rationing was being felt by the Academy.[43]

[43] Interview with Dr. William G. Guy, Williamsburg, July 1, 1966.

By May 12–13, 1943, Dr. Ivey F. Lewis was willing to recognize the hopelessness of attempting to continue the *Virginia Journal of Science;* therefore, he moved that the *Journal* be allowed to publish two more numbers and that it then be suspended for the duration of the emergency. Dean Wortley F. Rudd seconded the motion and the Council adopted the proposal.[44] Secretary Miller was also experiencing some hardships as he reported that wartime conditions had made the year a particularly lean one financially and had put the Academy some $20 in the red.[45]

[44] *Proceedings, 1942-1943,* 10.

[45] *Ibid.,* 14.

On the brighter side, Dr. Negus was able to report that he had worked out a plan for affiliation which had met with the approval of both the Academy Council and Science Clubs of America, Incorporated. The plan allowed the Virginia Junior Academy of Science to become an affiliate member of the national organization under the auspices of Science Service.[46] Also Dr. Boyd Harshbarger of Virginia Polytechnic Institute was given permission by the Academy to organize a section concerned with statistical method for the next annual convention. Harshbarger's efforts met with success as the Statistics Section was able to present a program of ten papers in 1943.[47]

[46] *Ibid.,* 19.

[47] *Ibid.,* 9.

Retiring President Marcellus H. Stow cited in his report to the Council the rapid progress made by the Virginia Academy in its first twenty years. But Stow looked beyond the history of the Academy and addressed himself, in a series of rhetorical questions, to the harsh realities which had confronted Virginia on the eve of the war, and which now seemed to loom even more ominously on the horizon of the postwar era. The President asked: "Will Virginia and the South reap the benefits of these postwar changes? Will Northern industry continue to exploit Virginia resources or even overlook them entirely? Will Virginia students, who desire the best education in the sciences, go to Northern Universities? Will Northern industries and Northern Universities continue to use the lures of higher salaries, more opportunities, or greater encouragement to entice the Virginia scientist to other regions?" Professor Stow offered a partial answer to the perplexing questions which he raised by asserting that through the combined efforts of Virginia schools and universities and the Virginia Academy of Science these problems could be dealt with.[48]

[48] *Ibid.,* 13.

W. Catesby Jones, who assumed the presidency in 1943, was somewhat more specific in his comments about postwar Virginia. The new president, who was Chief of the Division of Chemistry of the Department of Agriculture, first spoke concerning the current meeting. "I am of the opinion," Jones said, "the only reason we could justify holding the Academy meeting this year would be to ascertain if we, as scientists, can do more than we are doing to promote the winning of the war, and to set our sails toward postwar planning." Postwar planning was obviously Jones's major concern, "the idea being, when certain defense industries in the Northern congested industrial areas have served their purpose that they be moved South where abundant raw materials can be found, and at the same time give employment to our own boys who have graduated from our Southern Colleges. In other words, move the industries South instead of the boys North." [49]

[49] *Ibid.,* 30.

The twenty-second annual meeting was attended fairly well under the circumstances, in Richmond May 9–10, 1944—a Tuesday and Wednesday—the first time an Academy convention was not scheduled on a weekend.[50] Incoming President Dr. Robert F. Smart of the University of Richmond gave a speech of acceptance in which he called for vigorous Academy action to insure postwar

[50] *Proceedings, 1943-1944,* 9; and Jeffers, History, 31.

progress for both science and industry in the South.[51] The president also noted that there was ample reason for a meeting in 1944 if the Academy could show some progress towards making things attractive enough for young people in the postwar environment to get them to return to the laboratory.[52]

Secretary Miller reported that although the Academy lost 50 members it still managed to close out the year in the black.[53] Also in 1944 the Academy Prize became the J. Shelton Horsley Research Award in honor of the fourth president of the Virginia Academy—the man who was responsible for soliciting the Research Endowment Fund. It was also announced that the Jefferson Prize, the successor of the Jefferson Gold Medal, would be discontinued.[54]

Chairman L. C. Bird prefaced the subcommittee reports of the Long Range Planning Committee with the summary comment that "the war has seriously interfered with the plans projected for the Virginia Academy by your Long Range Planning Committee."[55] Dr. Stow of Washington and Lee and Mr. Davis of Williamsburg backed up Bird on this count in their respective reports. Davis acknowledged that the Academy had been unable to organize a Junior Academy meeting in either 1943 or 1944 because of the travel difficulties, and that since no dues had been collected, the Juniors were proceeding to run up a debt.[56] Dr. Stow informed the Academy that all the authors concerned with the James River monograph appeared to be directly or indirectly engaged in the war effort as no additional chapters had been turned in to him during the past year.[57] A darker day, however, lay ahead for Chairman Stow.

As the war drew to an end the Virginia Academy of Science was in less than ideal circumstances. Only a handful of scientists were summoned for a special meeting in Richmond. As President Robert F. Smart conceded, the Academy was forced by the exigencies of war to cancel its regular meeting for 1945.[58] It was merely a specially convened Council which perpetuated the continuity of annual spring conferences at this meeting on May 11, 1945, at the Medical College of Virginia.

Secretary Miller reported that Academy membership had fallen from a peak in 1941 of 912 to roughly two thirds of that number, 629, in 1945.[59] Dr. Jeffers had announced the past November at the fall Council meeting that his Museum Committee had toned down its proposals considerably. The committee was now willing to take over the Finance Building for its museum after a new office building could be constructed to take the Finance Building's place. "Governor Darden," said the chairman, "went so far as to promise to include such a recommendation in his message to the Legislature which meets in January."[60] However, Virginia is still without a science museum. The outlook was not nearly so bright in 1945 for Chairman Stow's James River project. It was "with the greatest regret" that Dr. Stow reported "that all progress on the Project was suspended during the past year. No manuscripts were received from authors assigned to the various chapters of the proposed *Monograph* and it should be presumed," he added generously, "that they are devoting their time to direct or indirect war work."[61]

The speeches of the incoming and retiring presidents of the Academy present an interesting study in continuity—not only for 1945, or even for the wartime period—but a continuity of philosophy and purpose which can be traced back to the very founding of the Academy. The war was all but ended in Europe; there was little doubt that the combined might of the allies in the Pacific would soon close that theater also. It was a time for starting anew; and what a start it could be for science as a result of the tremendous acceleration of scientific research which took place during the war. But the "war of science," observed Dr. Smart in his retirement address, was not in all ways a success for science; nor was it exactly, as Jeffers put it, "the vindication of science."[62] "It can no longer be accepted," remarked Smart, "that the results of scientific investigation will lead to continuous progressive improvements in conditions of life." Indeed, he continued, "the war has proved this and even now voices are being raised demanding the cessation of scientific research as the only means of preserving mankind." However, Smart came prepared to do much more than merely acknowledge this threat to science—he offered a plan to stop this antiscientific offensive. Smart announced, with evident pleasure, that the Academy Council had been in joint session with the Executive Committee of the Social Science Association

[51] *Proceedings, 1943-1944*, 30.

[52] Jeffers, History, 32.

[53] *Proceedings, 1943-1944*, 24.

[54] Flory, Research Committee History, 13.

[55] *Proceedings, 1943-1944*, 11.

[56] *Ibid.*, 12-15.

[57] *Ibid.*, 12.

[58] *Proceedings, 1944-1945*, 11.

[59] *Ibid.*, 14.

[60] *Ibid.*, 30.

[61] *Ibid.*, 30.

[62] Jeffers, History, 33.

of Virginia. Nothing definite could be reported at the time, nor was any lasting arrangement effected; but most Academy members were certainly in agreement with Dr. Smart in his fervent hope "that the seed of close cooperation planted today will bring forth a rich harvest tomorrow."[63]

[63] *Proceedings, 1944-1945,* 13.

President-elect H. Rupert Hanmer, Director of The American Tobacco Company Research Laboratory, delivered his inaugural address on "The Responsibility of Science in a Postwar World." Hanmer's main point was his plea for "a wider dissemination, through youth, of scientific knowledge so that the growing generation may have a clearer understanding of the spirit of Science, the real objectives of scientific effort; to the end that all people may learn to know and respect the world in which they live." It is "knowledge," Hanmer concluded, "which will banish fear, respect which will prick the bubble of vanity—twin viruses which have so long blighted the flower of good will among men."[64]

[64] *Ibid.,* 10.

On these notes of challenge for the future Hanmer and Smart brought to a close the war years which Dean Wortley F. Rudd had ushered in at the eighteenth annual meeting by encouraging the Academy to meet a changing world by being itself amenable to change. The Academy had indeed been challenged by new and trying circumstances as Rudd had predicted; but even greater challenges could be forecast for the future. Although the particulars would differ, what Hanmer and Smart saw in both the present and the future was nothing more, in essence, than what Dr. Ivey F. Lewis, founder of the Virginia Academy of Science, had already seen so vividly in the past. As Lewis pointed out in 1924: "Science must defend itself anew as it has often done in the past." The Virginia Academy of Science had to defend itself in 1945 by resisting the "voices . . . being raised demanding the cessation of scientific research." The Academy chose to do this by attempting to destroy the "two viruses," fear and vanity, "which have so long blighted the flower of good will among men."