A Scientific Outpost:

The First Half Century of The Nantucket Maria Mitchell Association

by THOMAS E. DRAKE

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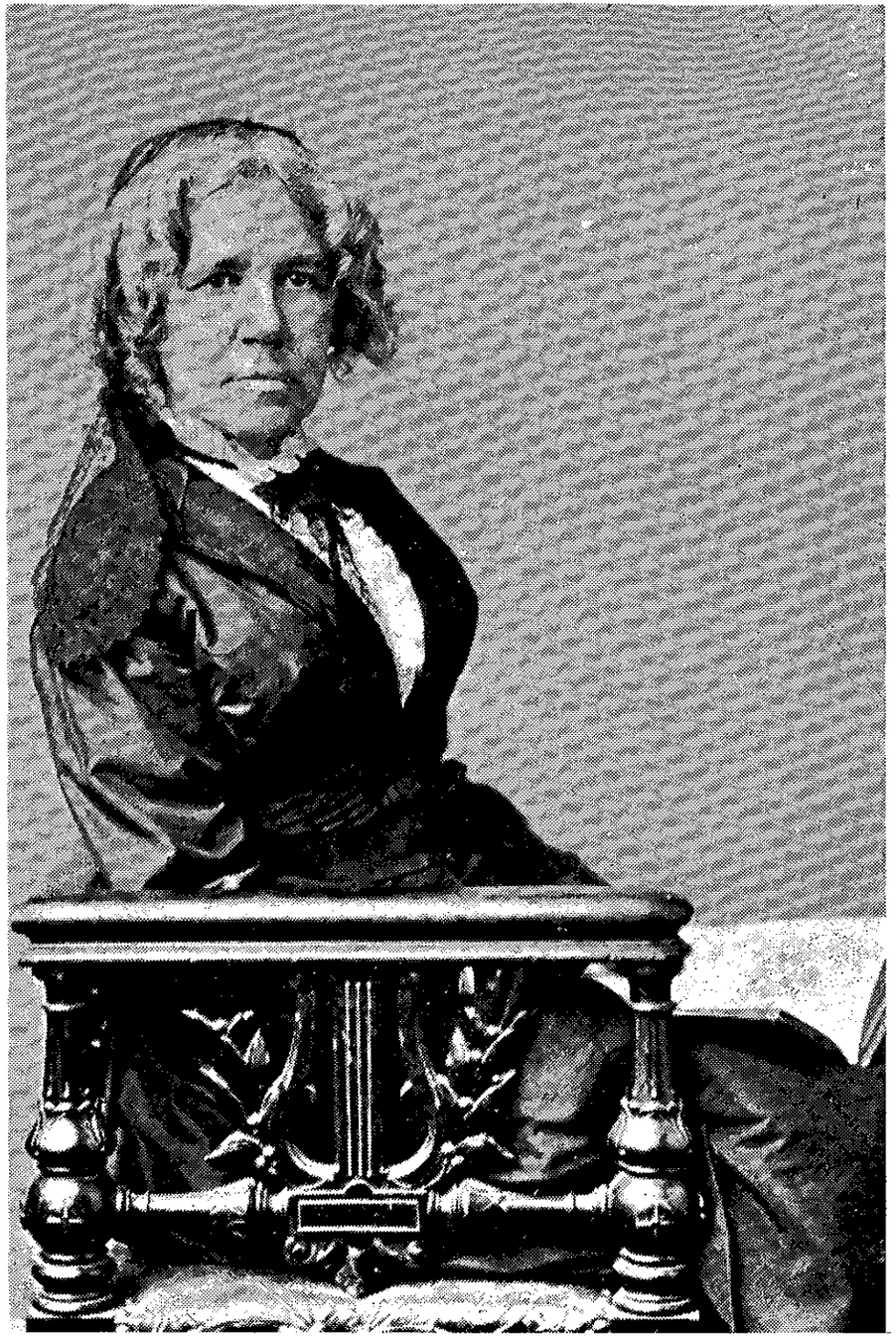
ILLUSTRATIONS

Courtesy Nantucket Historic Districts Commission.

Among the many unusual women which the island of Nantucket produced during its great whaling days, Maria Mitchell, America's first woman astronomer, stands preëminent. Trained by her father, an enthusiastic amateur, she suddenly achieved fame when in 1847, at the age of thirty, she herself discovered a telescopic comet. With the gold medal which the King of Denmark presented to her in recognition of her discovery came national and international recognition. She was elected to membership in the American Academy of Arts and Sciences — the only woman before 1943; to the American Association for the Advancement of Science; and to the American Philosophical Society. Only one other woman preceded her in the Philosophical Society, the mathematician Princess Catherine Dashkov of Russia, in 1789.

Colleges gave Maria Mitchell honorary degrees. The "Women of America" presented her with a telescope. She visited the observatories and astronomers of Europe. And when Vassar opened in 1865 she became the first woman to be appointed Professor of Astronomy in the United States. At Vassar for nearly a quarter of a century she distinguished herself not only as a scientist but also as a great teacher and an able advocate of women's education and women's rights.[1] Thus, to honor this famous Nantucket scientist, in 1902 a group of women with Nantucket and Vassar connections purchased the old house on Vestal Street in which Maria Mitchell was born, in order to establish a memorial to Nantucket's most distinguished daughter. They called themselves The Nantucket Maria Mitchell Association.

Interestingly enough, the 1902 group was not the first to organize a memorial to Nantucket's famous astronomer. In 1890, only a year after Professor Mitchell's death, the Island's Atheneum, of which Maria Mitchell had been the first librarian, opened a public subscription to have her portrait painted for the library. Contributors were to become members of a "Nantucket Maria Mitchell *Memorial* Association"; any surplus beyond the cost of the portrait was to go into a special fund, the income of which would be used to



Maria Mitchell (1819-1889) America's First Woman Astronomer

buy books. Within less than two years the Nantucket papers reported not only the hanging of the L. T. Billings portrait in the Atheneum, but the collection of nearly five hundred dollars for the book fund. But with this, the first memorial association for Maria Mitchell dropped from public view.[2]

The second and present Association began quite differently. According to the story told by those most closely involved, people had noticed that after Maria Mitchell's death in 1889 many Vassar graduates who visited Nantucket made a point of seeking out the birthplace of their remarkable Professor of Astronomy.[3] The house, built in 1790, now belonged to Maria's aunt, Mrs. Peleg Mitchell, whose husband had bought it in 1837 from his brother William Mitchell, Maria's father, when William became cashier of the Pacific Bank and moved his family into the apartment over the little brick bank building at the head of Main Street. Thus it happened that Peleg Mitchell's three daughters, Mary, Eliza, and Lydia, like their cousin Maria, had also been born and brought up in the Vestal Street house. All three had moved to Philadelphia when they grew up, and their mother also went there to live with her daughter Mary, now Mrs. Benjamin Albertson. But Mrs. Mitchell and Mrs. Albertson spent their summers on Vestal Street, and there, one day in the summer of 1896, when Lydia, the youngest daughter, and her Philadelphia husband, Charles S. Hinchman, came to Nantucket to visit, Charles Hinchman made the suggestion that the old Mitchell house should be preserved as a memorial to Maria Mitchell.[4]

Mrs. Hinchman and her two sisters responded enthusiastically to the idea, and when their mother died in 1902 they immediately set about to create a memorial to their distinguished cousin. Lydia organized and promoted the project. Eliza her next older sister, and companion in the household in Philadelphia, served at one time as Treasurer of the organization. Mary became the first Curator of the Memorial House and directed its program every summer for the first decade.

For the rest of their lives these three Nantucket-born sisters worked to make what they called The Nantucket Maria Mitchell Association not only a memorial to a distinguished Nantucket woman, but to create a popular scientific center for people on the Island, and to develop an institution where scientific research worthy of America's first woman astronomer might go forward.

First they transferred their title to the house to two Nantucket trustees, Charles C. Crosby and Henry S. Wyer. They then persuaded Vassar professors and alumnae to set up an organizing committee, sent out a circular in September, 1902, describing the project, and invited people everywhere to join in its support. Characteristically, the three sisters who started the Association, did not allow their names to appear on its organizing committee nor among the first group of officers and members of the Board of Managers, although they did most of the promotional work behind the scenes. Professor Mary W. Whitney, one of Maria Mitchell's first Vassar students and her assistant and successor as Professor of Astronomy, served as chairman of the committee. Laura J. Wylie, Professor of English, and Lucy Salmon, Professor of History at Vassar, also took part, together with Vassar alumnae from Philadelphia,

Baltimore, Brooklyn, and Boston. Two prominent Nantucket women joined them, Annie Barker Folger and Florence M. Bennett.

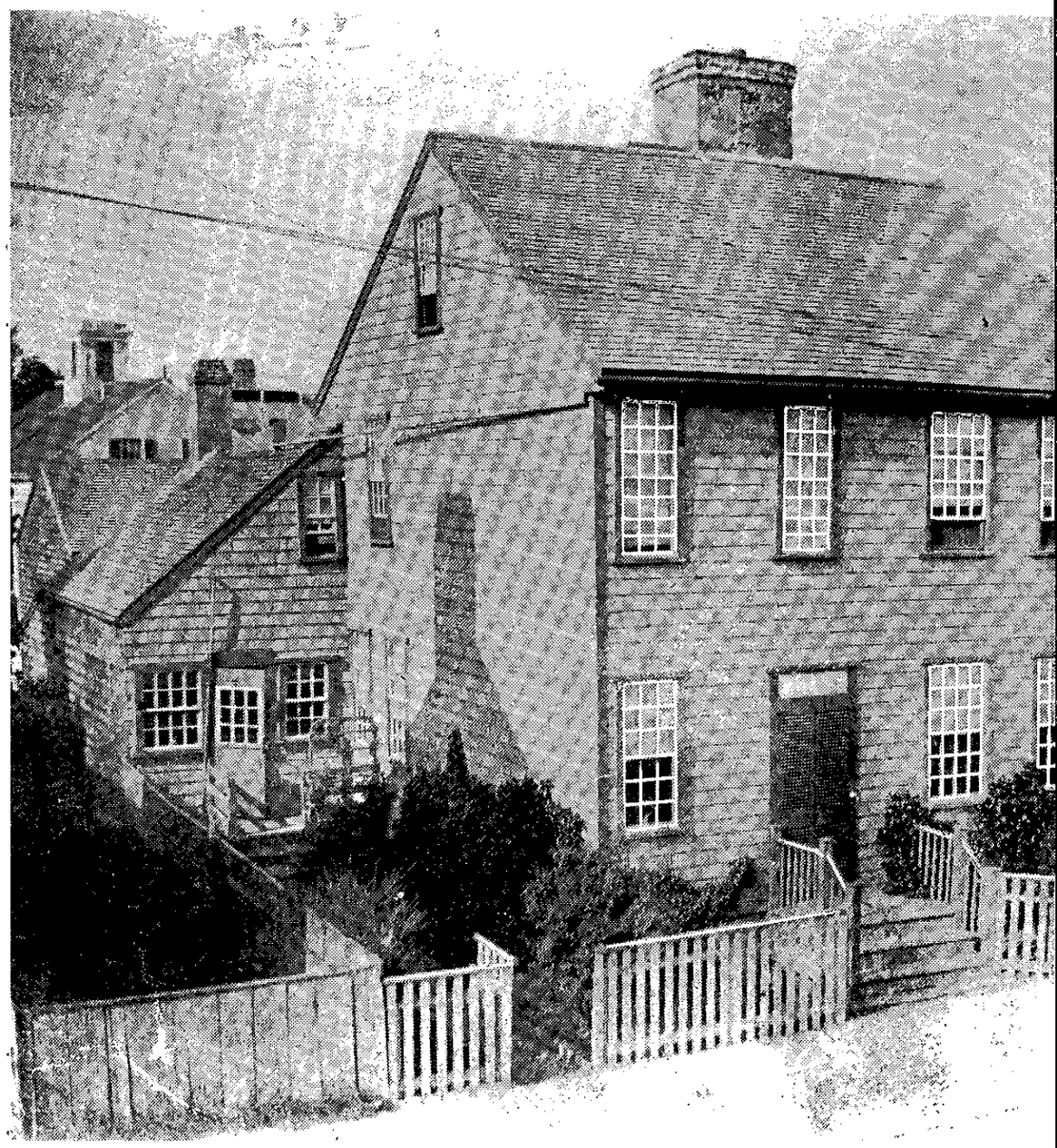
By late January, 1903, the committee was ready to set up a formal organization, so it met at Delmonicos, New York's famous turn-of-the-century restaurant, to elect officers, and arrange to obtain a Massachusetts charter. Professor Whitney became President, Lucretia B. Justice of Philadelphia (Vassar, '98) Treasurer, Mrs. Anna (Wilkinson) Head (Vassar '98), Secretary, while four Nantucketers, Annie Barker Folger, Rebecca A. Gardner, Gulielma Folger, and Susan E. Brock, were chosen for the Board of Managers. Those four, with three other women of the Island, constituted a House Committee, who arranged to have the Memorial House open to the public for the first time in the summer of 1903. The Association received its charter of incorporation on July 18th of that year.

When they published their first *Annual Report* for 1903 the Managers recorded two important acquisitions: Professor Henry Mitchell, oceanographer and Maria's younger brother, gave his sister's scientific library to the Association as a nucleus for the science library on Vestal Street. His daughter, Mrs. John F. Havemeyer, of New York, lent the Association Maria Mitchell's small spy-glass telescope; and Maria's nephew, Dr. Clifford Mitchell of Chicago, lent the "little Dolland" telescope, which William Mitchell had used to observe a total eclipse of the sun in 1831, and with which Maria discovered her comet in 1847.[5] The Managers also reported 220 members in the Association, mostly women and Off-islanders, some summer residents of Nantucket. The By-Laws provided that all the officers and managers should have Vassar or Nantucket connections.[6]

With the Association established, the founders set to work to give it vitality. Mrs Albertson came up from Philadelphia to open the Memorial House to the public each summer. As a competent amateur botanist and teacher, she set up in 1904 what eventually came to be called the Department of Natural Science. Grown-ups and children alike visited the House, not only to inspect the Mitchelliana but to see the collections of shells, flowers, and other objects on display, and to study the natural history of the Island.

Mrs. Hinchman, unlike Mrs. Albertson, never returned to Nantucket after her mother's death in 1902, partly, perhaps, because she didn't like the sea crossing from the mainland. But from her home at 3635 Chestnut Street in Philadelphia, and her summer place at Sea Girt, New Jersey, she worked indefatigably to promote the growth of the Association. Through correspondence, and the reports of her sister and her own five children when they visited the Island, Mrs. Hinchman kept in close touch with developments on Nantucket. The first annual meeting of the Association in April, 1903, took place in Mrs. Hinchman's Philadelphia living room, but beginning in 1904 these meetings occurred in Boston, and Mrs. Hinchman faithfully attended them year after year until in her mid-seventies she stopped trying to make the long journey from Philadelphia.

At the early meetings Mrs. Hinchman often presided, in the absence of the president and vice-president. At the beginning she held no formal office



The Memorial House or Birthplace *ca.* 1903

herself, but in 1905, perhaps to regularize her frequent and necessary presiding at meetings, she became third vice-president, and, in 1914, first vice-president, which was the highest office she ever held.

This pattern of personal subordination but complete dedication to promoting the growth of the Maria Mitchell Association characterized every aspect of Lydia Hinchman's work. Always she conceived of the Association as something larger than a personal or a Mitchell family affair. She sought to arouse the interest and financial support not only of Vassar and Nantucket people, but of anyone else she could draw into the work. But she herself, with a photographic memory and a passion for detail, kept track of everything that happened on Vestal Street, counseled with the staff, planned the budget, watched the expenditures, pushed the campaigns for funds, and shaped the development of the Association's program for over thirty years.

The three-fold aspect of that program soon began to take form: first the Memorial House itself, a quiet, well-kept example of an early nineteenth-century Quaker home, as Maria Mitchell had known it; then the Department of Natural Science, an expression of Maria Mitchell's broad interests in science, and of Mrs. Albertson's enthusiasm for the flora and fauna of Nantucket and her feeling that the children on the Island needed something to occupy their energies in the summertime; next, as soon as funds and equipment could be secured, the Department of Astronomy; and finally, a scientific library, which would serve the needs of the two departments and help develop scientific interests in the community as well.

All this would take money, and in money matters Mrs. Hinchman showed special talent. Her husband, a successful businessman, often said that his wife had a better head for money than he. To the Maria Mitchell Association Lydia Hinchman gave generously herself as well as raising funds from others. Her personal contributions cannot easily be distinguished in the records of anonymous gifts, either for capital funds or for running expenses. Without her gifts the Association would not have grown as it did. More important, however, was her ability to obtain capital funds when needed, in sums both small and large, from members of the Association and the public.

In the beginning the Memorial House itself took very little money. Family tradition has it that Lydia bought the shares of her two sisters, but allowed the Association to purchase the House so that the members would feel a personal interest in the project. The purchase money went back into fixing up the House and getting things started.[7] In 1906 Mrs. Hinchman bought the Frederick Gardner place with forty feet of land just west of the Memorial House, tore down the building and gave the lot as a site for an observatory to house Maria Mitchell's telescope.[8] At the same time she led the efforts of the Permanent Fund Committee, to build up an endowment for running expenses and salaries.

Salaries presented no problem at first, for Mrs. Albertson served without charge as Curator and Librarian; but by 1907, after Vassar alumnae and other people had been solicited for funds, the Association paid her and her daughter, Alice, who served as her assistant, each $100 for a summer's work.

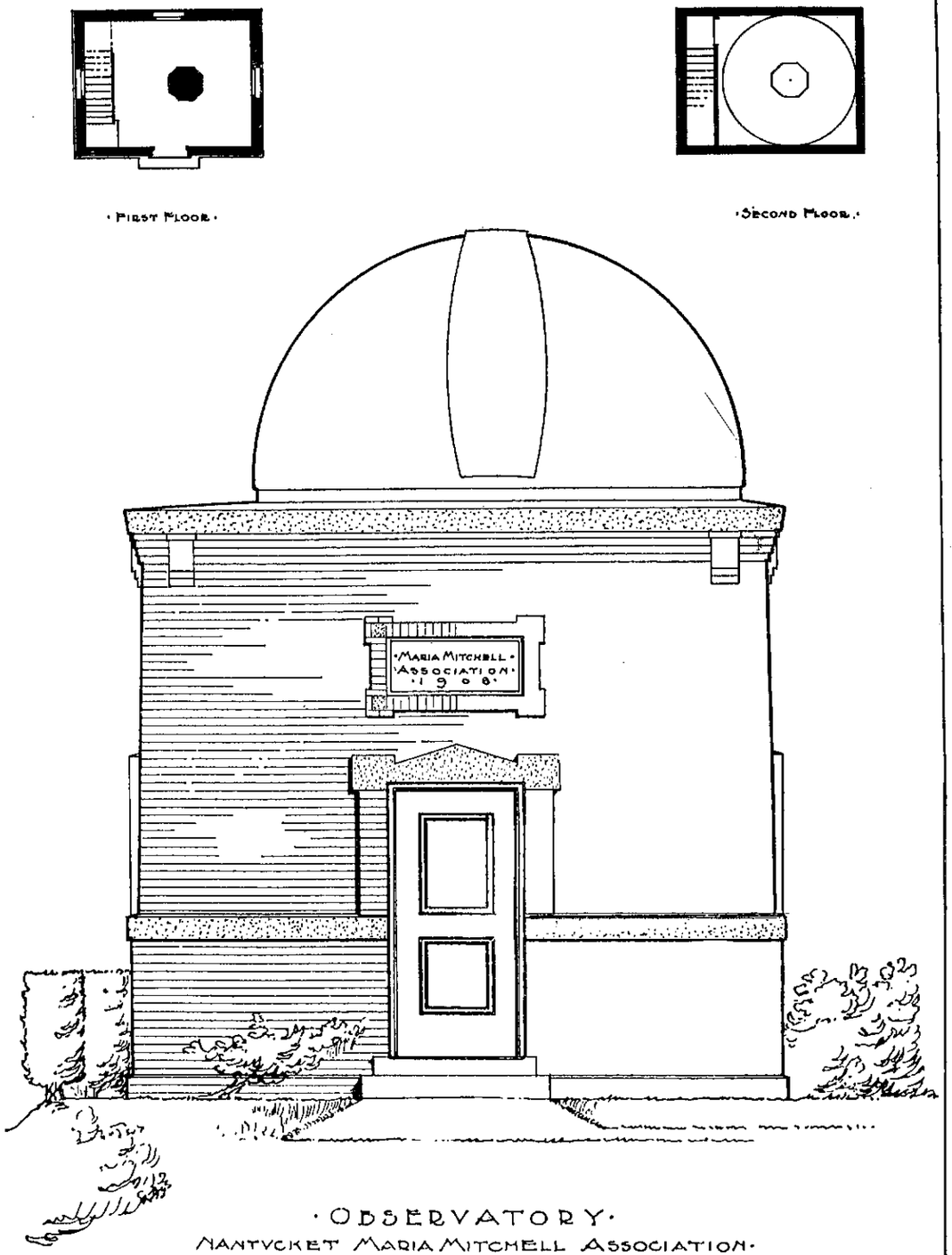
The Managers decided in 1906 to seek wide support based on a broad program. They realized, they said in their *Report* for that year, that the personal interest felt by the members of the Association because of their love for Maria Mitchell would end with themselves. An endowment fund must be collected and a policy outlined which would commend itself both to the people of Nantucket and to summer visitors, in order that the new institution might not only "perpetuate the memory of a great woman," but "create a new center of culture for one of the most interesting of New England's country towns." Then the Association would be maintained "long after its founders are forgotten."

Mrs. Albertson inaugurated a program of talks on birds, butterflies, and eclipses; she promoted "Moon Evenings," with Maria Mitchell's telescope set up out in the yard; and she encouraged a study of the Sankaty Head pleistocene fossils under Dr. Joseph A. Cushman of the Boston Natural History Society. His pamphlet on the subject appeared as the first Maria Mitchell Association publication in 1906.

As popular interest in the Moon Evenings developed, Mrs. Hinchman and Mrs. Albertson opened a correspondence with Harvard University, asking assistance in developing a more substantial program in astronomy. Dr. Edward C. Pickering, Director of the Harvard Observatory responded generously; and his appeal to a member of his staff, Miss Annie J. Cannon, to advise and assist the Maria Mitchell Association provided an indispensable collaboration for Nantucket astronomy for the next thirty-six years. In 1906 and 1907, Miss Cannon, who became America's leading woman astronomer of her generation, spent two weeks on the Island, lecturing, and encouraging the students in the astronomy class, while she directed the work of the astronomy class by letter when she returned to Harvard.

In 1906 also, Professor Mary Whitney, the Association's President, gave an astronomy lecture in the North Church. That same year two members of the Association, Dr. and Mrs. William Rollins of Boston bought and presented to the Association Maria Mitchell's 5-inch Alvan Clark refracting telescope, the instrument which had been given her in 1859 by the "Women of America" but which had been sold after her death. Ownership of this telescope meant building an observatory, so Mrs. Hinchman inaugurated a campaign to provide one. On July 15, 1908, after an expenditure of $4,200, the Maria Mitchell Association dedicated its present red brick observatory on Vestal Street.

The time had now come to employ a professional astronomer. The year the new Observatory opened, an Observatory Committee, under the chairmanship of Miss Cannon, raised enough money to bring Miss Ida Whiteside, who had been trained at Vassar and was Assistant at the Whitin Observatory at Wellesley, to observe, teach, and open the Maria Mitchell Observatory to the public for four weeks. During the next three summers, from 1909 through 1911, they employed Dr. Florence E. Harpham, Professor of Mathematics and Astronomy at the College for Women in Columbia, South Carolina, to open the Observatory for six weeks. Her research work lagged in favor of lectures and classes, Miss Cannon reported in 1910, so great was the summer demand



for popular instruction in Astronomy. This obvious need inspired the leaders of the Maria Mitchell Association to seek funds for an all-year program.

Mrs. Hinchman and the Astronomical Fellowship Committee set about raising the money necessary to put Astronomy on a scholarly, professional basis. They approached friends and philanthropists alike for support. People like General William J. Palmer, the Colorado railroad man and a Civil War companion of Charles Hinchman, gave generously. Andrew Carnegie, attracted by the appeal of Professor Caroline E. Furness of the Vassar Observatory, added a ten-thousand-dollar matching gift to the fifteen thousand raised by the Association.[9] By 1911 the Committee had an Astronomical Fellowship Fund sufficient to begin the search for an astronomer.

They circularized the astronomical departments of the United States, and, after considering eight applicants from California, Colorado, and points east, settled on a young Radcliffe graduate of the class of 1907, who had been working since that time at the Harvard Observatory. Appointed as Fellow in 1912 for one year, Margaret Harwood began what was to be a period of forty-five years' work for the Maria Mitchell Association.

By the terms of her Fellowship Miss Harwood was to spend the period from mid-June to mid-December at the Nantucket Observatory and to be "occupied in observation, research, or study, and in lectures or instruction to classes or individuals." After a six weeks' holiday she was to go to a "well-known observatory for four and a half months of research and study." Every fourth year the Maria Mitchell Fellow would spend a full year in study "at one of the larger observatories in Europe or America." Hence, although the appointment was for one year, preference would be given to the candidate who might be expected to remain the full four years, in order to give continuity and direction to the work in Nantucket.

Here then was a plan for a true research observatory in which, as Mrs. Hinchman often stressed in her letters to Miss Harwood, scientific work was to take preference over more popular activities. She wrote to the newly appointed Fellow on March 18, 1912, outlined what had occurred at the Observatory in previous summers, and apologized for the amount of time the astronomers had spent on popular lectures, elementary classes, and star-gazing nights for the public. The only justification for this type of program in the first years was the need to arouse public interest sufficient to produce the funds required to carry on more scientific activities. "I have read somewhere in one of Miss Mitchell's diaries," Mrs. Hinchman said, " 'There is no such thing as popular astronomy.' Now, not dropping the popular program althogether, we wish to leave our Fellow free for her *real* work as far as possible."[10]

It was soon evident that the new Fellow suited well the various needs of the Nantucket job. As Miss Cannon reported for the Committee in 1913, Miss Harwood's "service was highly satisfactory in every way to all associated with her, and her enthusiasm for her chosen science tended to interest many, both residents of the Island and summer visitors." Through her first summer and fall she held Open Nights for the public, lectured, talked to school

children, engaged in telescopic research, and studied photographic plates lent by the Observatory at Harvard. After December, when the weather became too cold to use the unheated Nantucket Observatory, she went up to Cambridge, where, as Miss Cannon remarked, opportunities for astronomical work by women were perhaps unequalled.[11]

Harvard had indeed taken the Maria Mitchell Observatory under its professional wing. After the Observatory had been built and it was clear that funds would be found to employ a permanent astronomer, Professor Pickering laid down the guidelines for a practical program of research for Nantucket which would fit nicely into some of the work that was going on at Harvard. He had in mind, it was reported to a special Managers' meeting at Mrs. Hinchman's house late in 1912, a study of asteroids by photography. To do this a new photographic telescope would be needed, to which Maria Mitchell's 5-inch Alvan Clark telescope could be attached as a guide, the whole apparatus to be moved at proper speed by a clockwork mechanism.

So the Managers decided to raise enough money to make possible their dream of an astronomical research center on Nantucket; and by November, 1913, they had installed a 7.5-inch photographic telescope, with a lens from Thomas Cooke and Sons in York, England, and mounting and clockwork by Alvan Clark Sons, in Cambridge, Massachusetts. Together these two telescopes provided the means by which the scientific observations of the Maria Mitchell Observatory, principally in the fields of asteroids and variable stars, have been made ever since.

The establishment of the Astronomical Department on a firm basis marked the culmination of the first decade of the Maria Mitchell Association. Until this time, most of the Association's activities had centered around the Memorial House, and the areas of natural science which the Curator, Mrs. Albertson, found interesting. She, working with the close sympathy of her sister, Mrs. Hinchman, and the encouragement and help of the Managers and House Committee, had furnished the Memorial House and directed its program. Her description of the plan for the House at the second Annual Meeting in 1904, for instance, showed the lines that this development would take. The Mitchell Family Room was to contain family pictures and memorabilia, together with Maria Mitchell's instruments and scientific books. The front parlour was to be a scientific reading room and library, with engraved portraits of scientists hanging on the walls; the first floor bedroom would house a museum display of speciments in conchology, mineralogy, botany, and kindred subjects.

Here it all was in prospect, a memorial to Maria Mitchell, a library, and a museum of the natural history of Nantucket. Each of these areas Mrs. Albertson had promoted during this first decade, proudly showing to visitors the House and its memorabilia, building up the library until space for it had to be found in a rented room next door,[12] trying to arouse popular interest in natural science, and paving the way for an eventual program in astronomy.

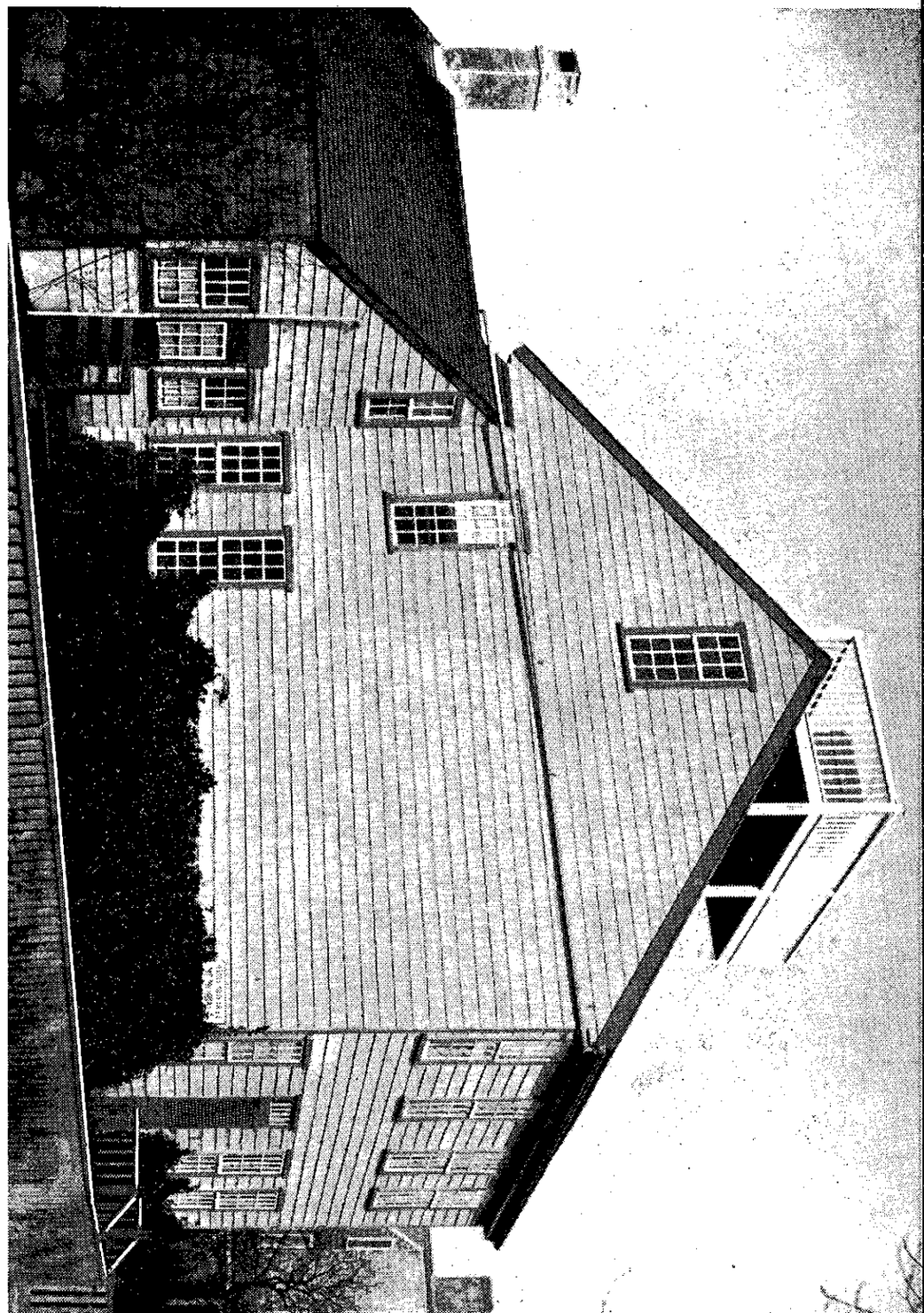
For what she called a "living herbarium" in the museum room, Mrs. Albertson gathered summer wild flowers from the moors and swamps. By

1910 she also had over a thousand dried specimens in the Association's permanent herbarium of Nantucket plants. In 1906 she arranged for summer lectures for adults and children in entomology and astronomy, and enlisted the life-long interest of Alvin E. Paddock, a Nantucket craftsman and teacher at the Coffin School, in helping to keep the astronomical equipment in good order. She not only encouraged the Sankaty Head fossil study under Dr. Cushman, and managed the Island visits and lectures of Dr. Pickering, Miss Cannon and others in astronomy, but she got Edward E. Wildman, the Philadelphia Quaker naturalist, and B. M. Duggan, plant pathologist from Cornell and Woods Hole, to lecture on botanical subjects. In 1910 she found time to serve as chairman both of the Publication Committee and the Observatory Equipment Committee, which arranged for the installation of the new photographic telescope in 1913.

In the winter time in Philadelphia Mrs. Albertson worked with Mrs. Hinchman on the correspondence relating to the Association, and one suspects that it was these two women, aided by Professor Whitney and other Vassar people on the Board of Managers, who mounted the quiet campaign necessary to bring Maria Mitchell's name to the attention of the electors of the Hall of Fame for Great Americans at New York University, when, in 1904, they decided to open their lists to women as well as men. In any event, Mrs. Albertson and Mrs. Hinchman accompanied Miss Whitney to the ceremonies in 1907, at the Colonnade on University Heights, where Professor Whitney gave the dedicatory remarks at the unveiling of a bronze tablet to honor Miss Mitchell, who, together with Emma Willard and Mary Lyon, had been selected as the first American women for the Hall of Fame.

Mrs. Albertson, the oldest of the three cousins who had founded the Maria Mitchell Association, died in 1914, and her death marked the end of an era as well as a decade. Her daughter Alice Albertson, a Bryn Mawr graduate and teacher of Latin at Friends Select School in Philadelphia, who had worked as her mother's assistant at the Memorial House each summer, took over her work. But by this date considerably more time, money, and attention were going into Astronomy than into Natural Science, for with Margaret Hardwood's being on the Island for half of each year, it was inevitable that the Observatory should occupy a large share in the activities of the Maria Mitchell Association, and that the Director should take a position of leadership in Association affairs.

In 1915 Miss Harwood received her "quadrennial leave of absence" to take a master's degree in astronomy at Berkeley, and when she returned to Nantucket in 1916 after having declined a teaching offer from Wellesley, it was to a permanent appointment as Director of the Observatory, at a starting salary of $1200 a year. As Director Miss Harwood continued along the line of astronomical research which she had begun before. She worked on variable asteroids, including the variable asteroid Eros, and released her results from time to time in the Harvard Observatory publications. *Popular Astronomy* also carried her reports on Eros and other subjects. During World War I she took time off for Red Cross Home Service work in Nantucket, but this was only a temporary interruption in her work in astronomy. She proved herself to be a first-class celestial photographer, and gradually accumulated an extremely



The Memorial House with Restored Walk, ca. 1915

valuable set of Nantucket photographic plates of variable stars for use in conjunction with the great collection at Harvard. In fact it might be said that the Maria Mitchell Observatory, during the period when Dr. Pickering directed the Harvard Observatory and for many years afterwards, was essentially an adjunct or outpost of Harvard.

Dr. Pickering's encouragement of the Maria Mitchell Association's work stemmed in part from his personal interest in opening up the field of astronomy to women. He joined Charles S. Hinchman in 1914 in financing a one-year fellowship for women at the Harvard Observatory. After this, contributions to a permanent fund were solicited by Mrs. Hinchman and the Association's Astronomical Fellowship Committee; in 1916, upon the fortieth anniversary of Dr. Pickering's assuming his Directorship, the Association presented to the Harvard Observatory a fellowship fund for women in tribute to him. Henceforth the Astronomical Fellowship Committee regularly reported to the Association on the work of the succession of young women appointed to this "Edward C. Pickering Astronomical Fellowship for Women" at Harvard.

Charles S. Hinchman's association with Dr. Pickering in promoting this project points up what he did for the Maria Mitchell Association itself. After his death in 1916 the Secretary reported to the Annual Meeting, "Mr. Hinchman was the 'silent partner' in the Maria Mitchell Association. His value cannot be overestimated and his loss is irreparable. It will never be known what he contributed in inspiration and money to the Society. Was there a deficit here? He made it up. Was there a call for funds to start a new phase of the movement? He responded generously. With Professor Pickering he financed the independent fellowship at the Harvard Observatory, thus proving that his interest in women as scientists was not bounded by the limits of our special work. His memory will be cherished as a special heritage."

In Natural Science too the work went forward in the second decade, as Alice Albertson carried on in her mother's place as Curator and Librarian. In 1921 she had developed her knowledge of botany to the point where she published a volume on *Nantucket Wildflowers*, the Island's standard popular guide to this subject. Anne Hinchman, artist and daughter of Charles and Lydia Hinchman, did the illustrations.[13]

In 1917 Dr. Helen Putnam, one of the Managers, suggested that the Association broaden its scope by instituting a department of Social Science. But the Board decided after some consideration that, pressed as they always were for funds, they had better concentrate on science in its more conventional forms, "The Social Science work is not within our province," they resolved in 1918 with evident relief.

The principal aim of the Managers in the immediate years after World War I was to find a permanent place to keep the Association's scientific library, which had again outgrown its quarters. This they finally did, after Mrs. Hinchman bought the land on the opposite side of Vestal Street on which stood a building which had once, in another location, housed William Mitchell's school. The Association moved the building a little, renovated it and dedicated it on July 15, 1920. It now forms the principal portion of the

The Maria Mitchell Free Scientific Library, 1921

present library building. Mrs. Eugene S. Morris, of Nantucket, became Librarian.

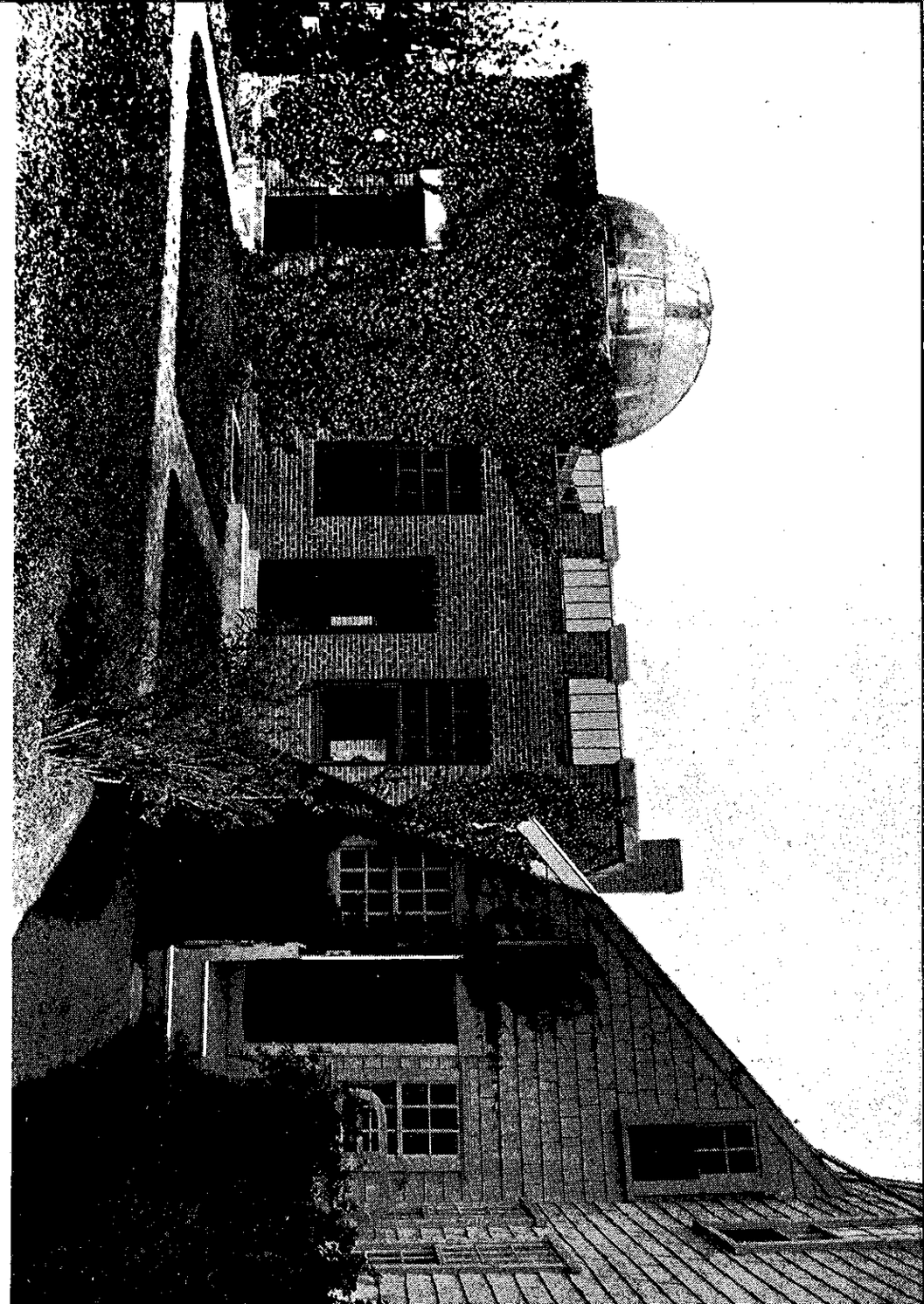
Meanwhile, Miss Harwood's photographic plate collection had grown until she needed heated winter storage to protect it, and a warm place to work in spring and fall. Recognizing this need, the Hinchman family gave five thousand dollars as a memorial to the late Eliza R. Mitchell, who had served as Treasurer of the Association from 1905 to 1918, and the Association itself raised fifteen hundred more, to build the brick Astronomical Study in 1922, between the Observatory and the Memorial House.

Also in 1922, to cap the Association's second decade, a bronze bust of Maria Mitchell went into the Hall of Fame in New York to supplement the earlier tablet. William Mitchell Kendall, an architect and nephew of Maria Mitchell, provided the funds to erect a replica of the Emma Brigham bust which stands in front of the Vassar Observatory, and Henry Noble McCracken, President of Vassar, gave the dedicatory remarks.

In its third decade, the Association continued its growth with an enlarged membership — 641 by 1932. In 1925 Mrs. Hinchman had her eightieth birthday, and a group in the Association honored her with a fellowship fund which would pay for a summer assistant in Astronomy.[14] But her years did not dim Lydia Hinchman's interest and enthusiasm. She still wrote frequently to Miss Harwood asking questions about the progress of her work on Nantucket, and Margaret Harwood responded just as frequently, reporting on the news of the Island and the Maria Mitchell Association. Their correspondence over the years fills several bulky file boxes in the archives of the Association, a solid testimony to their friendship and their devotion to the Association.

In 1926 the opportunity came to secure a permanent residence for the Director of Astronomy. The Charles Williams cottage next door to the Observatory came on the market. Miss Harwood had boarded there in the early days, and then rented the whole house after 1921. When it went up for sale in 1925 she decided to buy it. But, realizing that the Maria Mitchell Association might itself want to own the property, she mentioned the possibility to Mrs. Hinchman. Mrs. Hinchman bought it immediately and gave it to the Association, with the understanding that Miss Harwood would pay for the running expenses and upkeep, while the Association undertook to make all major repairs. This arrangement for what came to be called the Director's Residence or Observatory Cottage lasted for the remainder of Miss Harwood's tenure, except that the Association paid the water rent after 1954.

On January 24, 1925, a total eclipse of the sun was central to Nantucket, and the Maria Mitchell Observatory served as one of the four Harvard eclipse stations. Margaret Harwood marshalled a large number of Nantucket helpers and took full advantage of the opportunities of a clear, frosty Nantucket morning. In temperatures ranging from five to fourteen degrees they took up their stations, at the Observatory, in the tower of the Unitarian Church, and at many other spots on the Island, and recorded the passing of the great shadow over the face of the sun.[15]



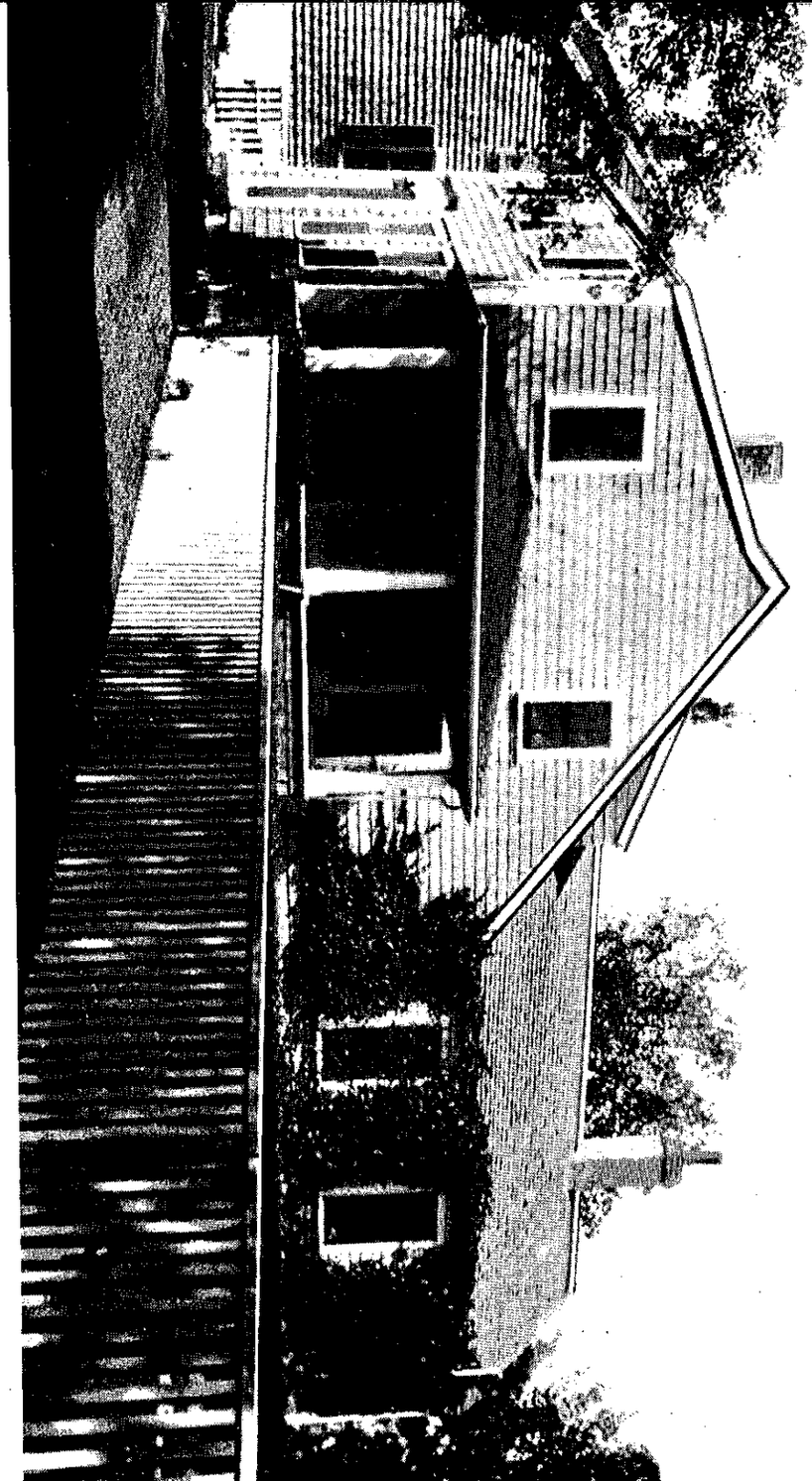
The Observatory, with the Astronomical Study built in 1922

The Managers concerned themselves particularly in this decade of general prosperity with strengthening the financial position of the Association. They sought and obtained increases in the endowment for salaries, for the work of the two departments and for the Library, feeling, they said in 1923, that they should put the Association on a sound financial basis before the acquaintances of Maria Mitchell had passed away. By 1928 the Association had brought up the value of its endowment in a quarter of a century to nearly $192,000.

In the nineteen twenties work continued in Natural Science each summer under the guidance of Alice Albertson, the Curator of the Memorial House. By 1924 the income from an endowment fund in memory of her mother, Mary Mitchell Albertson, had grown sufficiently to permit the rental of a room for an adult study class; children's classes also met there in rainy weather, taught by a Vassar graduate. Experts from the University of Pennsylvania and the New York Botanical Society gave public lectures from time to time and Miss Albertson put on a flower show every summer in the Memorial House — 430 persons saw it, for instance, in 1925. In that year the Association also acquired nine acres of swamp and upland, called Taupausha, located east of the Polpis Road, for ecological study; and the next year Ellenwood B. Coleman gave a three and a half acre plot near Hummock Pond as a bird sanctuary.[16] In 1926 Miss Albertson received the title of Director of Natural Science as well as Curator. She continued in this dual role until 1931, when the Managers decided to separate the two offices and appointed Mrs. Zeta F. Boyer, a Nantucket woman, to the Curatorship. Miss Albertson, who in 1929 had married the architect, Alfred F. Shurrocks, remained Director of Natural Science until 1933. Then, to take her place the Board appointed her assistant, Miss Grace Wyatt, a college science teacher with a Master of Arts degree from George Peabody College in Nashville.

Various special activities marked the work in Natural Science in this third decade. Miss Dixie Pelluit, assistant to Miss Albertson in the late 1920s, found the material for her Ph.D. dissertation in her ecological studies at Taupausha. Richard M. Hinchman, a grandson of Charles and Lydia Hinchman who came as the first student assistant in the Observatory in the summer of 1931, banded birds in his spare time at the camp which had been built at the Coleman sanctuary. The Association also published in 1930 *A List of Insect Fauna of Nantucket; with a List of Spiders by James H. Emerton.* Charles W. Johnson, Curator of Insects and Mollusks at the Boston Society of Natural History, prepared the monograph for publication.

During the nineteen twenties Miss Harwood's work in astronomy brought increasing recognition to the Maria Mitchell Observatory. In 1926 the American Astronomical Society held its annual meeting on Nantucket. In 1930, the American Association of Variable Star Observers, in whose special field of interest Miss Harwood's research lay, came to the Nantucket Observatory for a meeting. And when in 1928 the Maria Mitchell Association printed a list of publications by the organization or its staff, it appeared that twenty-three of the twenty-eight papers on scientific subjects had been written by the Director of the Observatory. One of these papers, published in 1924 in the *Harvard Circular 269,* which contained the results of her work on variable



The Observatory Cottage, purchased 1926

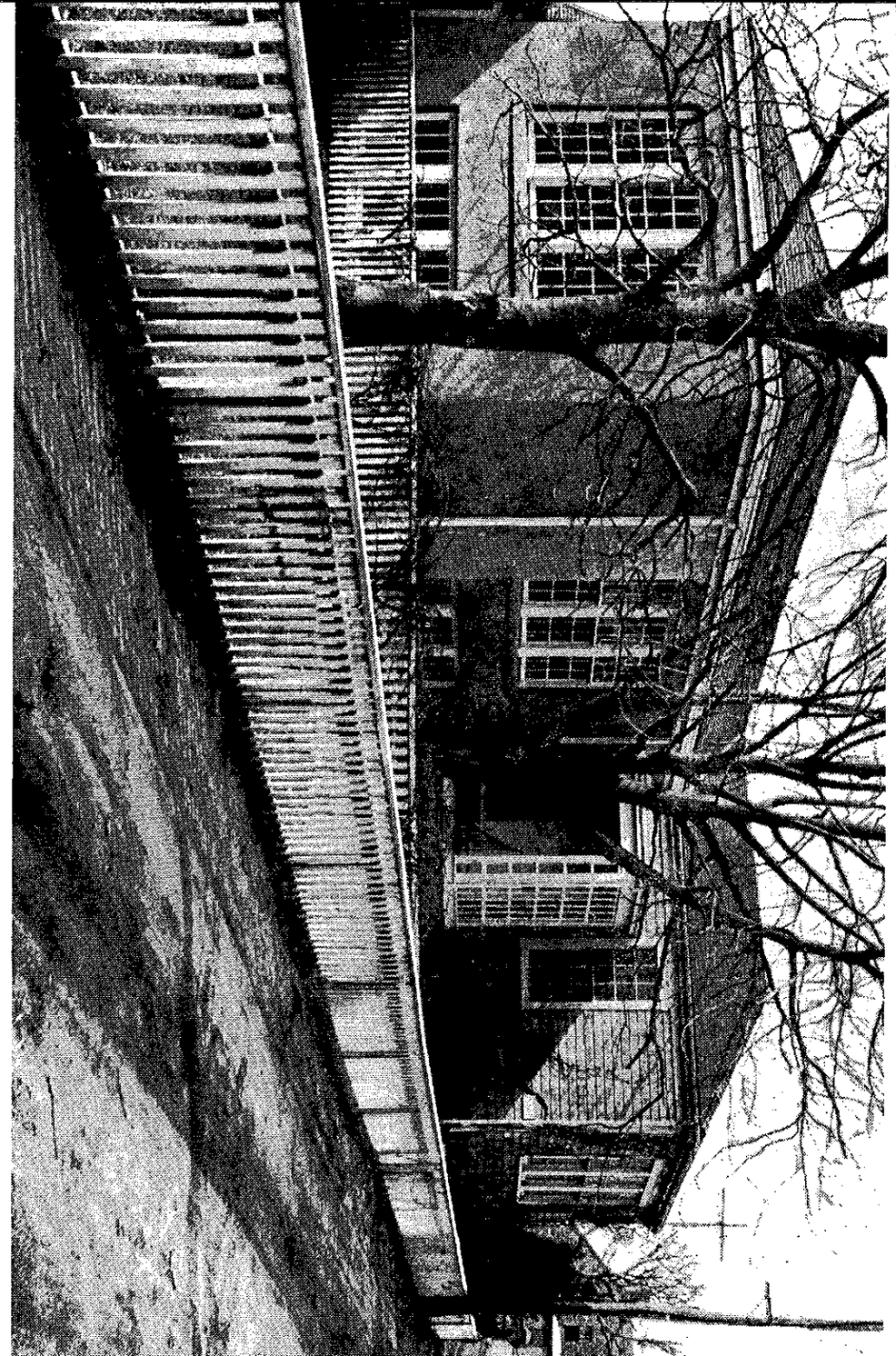
asteroids, was used as a portion of the report to the International Astronomical Union's Commission 16, "The Physical Observations of Planets, Comets, Satellites." As a result Miss Harwood was voted a member of the I.A.U.

The Officers and Managers rejoiced in the growing reputation that Miss Harwood's work brought to the Association and to herself. They were gratified that their policy of granting her periodic leaves of absence for study and attendance at professional meetings had improved her acquaintance with the astronomers and observatories of this country and Europe. They were proud when she became the first woman to be allowed to use the large telescopes at Mt. Wilson for photographic work. At a special meeting in 1929, they not only voted one of their periodic increases to her modest salary, but spoke very admiringly of her work.[17] The following year, and frequently thereafter, she received grants-in-aid from organizations such as the American Academy of Arts and Sciences, the National Research Council and the American Association for the Advancement of Science, in order to employ assistants for her research. In 1932, for instance, Miss Harwood had grants sufficient to employ two women to help her during the winter months at the Harvard Observatory; and in the summers she continued the practice of using a young man as a student assistant in the Observatory. Following Richard Hinchman, two competent Nantucket boys held this post — Edgar F. Sanborn, Jr., and John H. Heath. The stipends for these male assistants came from "grants-in-aid" received by the Association, or in stringent times such as the early thirties, when Miss Harwood's salary was reduced in order to make up the deficit in Observatory operating funds, their salaries came from the Director's own pocket.

The total eclipse of the sun which occurred on August 31, 1932, gave Miss Harwood another opportunity to organize a program of observation and photography. Since Nantucket lay fifteen miles outside the path of totality, she left her assistant, Alvin E. Paddock, to take photographs with the Observatory telescope, but herself led an expedition to a great stone tower near Highland Light at the northern tip of Cape Cod. Here reasonably good weather enabled the expedition to photograph the corona, while the larger expeditions in northern New England and Canada suffered a blackout from clouds.

In 1932, also, special gifts and accumulated funds enabled the Association to install an electric drive in the Observatory in place of the pendulum clockwork which had so long propelled the photographic telescope on Vestal Street in its slow sweep across the Nantucket skies.

The Library outgrew its first building within a decade, and in 1930 the Managers began raising funds for an addition. Alfred F. Shurrocks designed the structure, and in 1933, after an expenditure of eleven thousand dollars, built the book stack with a main floor and basement now known as the "Fireproof Wing." A prime mover in this enterprise was the new treasurer, C. Russell Hinchman, whose accession to that office in 1930 marked the first time that a man had been an officer of the Maria Mitchell Association. Men had been on the Advisory Council, men had lectured, men had served on committees. But this son of Charles and Lydia Hinchman, like his father a Philadelphia businessman, naturally took a great interest in the Association,



The Fireproof Wing of the Library, built 1933

particularly in its financial affairs. So when Miss Florence Dunlap, his secretary, who had been Treasurer for many years, had to resign for reasons of health, it was logical to draft Mr. Hinchman, who was already chairman of the Finance Committee, to take her place. In 1931, his younger brother, Walter S. Hinchman, a writer and teacher of English at Milton Academy, was elected a vice-president, and in 1933, William C. Brock, a Nantucket insurance man who, like his father before him had often been helpful to the Association, was also made a vice-president. That year the Managers relaxed the "Vassar rule" in the By-Laws, which had required that a majority of the Board members have Vassar connections, and they also eliminated the word "she," which had been used to describe the President of the Association. In 1936 Charles P. Kimball of Rochester, New York, and Nantucket, became the first man elected to the Board of Managers.

These changes in the fourth decade of the Association's life were less radical than they appeared on the surface. The shift in the management away from Vassar occurred naturally, as the college generation that had known or known of Maria Mitchell died. It was natural too that a generation of women less concerned with women's rights than their mothers and grandmothers had been, would come to welcome the chance to share the responsibilities of management of the Maria Mitchell Association with interested and able men. But there was not to be a male president of the organization for another fourteen years. And the daughters as well as the sons of Charles and Lydia Hinchman took an increasing interest in the Association, as their mother, approaching her ninetieth birthday in 1935, found herself less able than earlier to keep a close watch on its affairs. Margaretta S. Hinchman, of Philadelphia, an artist like her sister Anne, decorated the hall in the Memorial House with a frieze on an astronomical motive. Mary, their older sister (Mrs. Isaac La Boiteaux, of Bryn Mawr, Pennsylvania), an artist and horticulturist, spent her summers on Nantucket from 1933 until her death in 1946, served on various committees, and was elected a vice-president to succeed her mother in 1938.

But none of this generation, as was said of Mrs. Hinchman by one who worked with her for many years, "held the reins, and told the President what to do."[18] They worked, they counseled, they advised, but they worked with, rather than directed, the other officers and the staff.

The President who was elected in 1930, Mrs. Francis W. Davis of the Cushing-Underwood families of Boston and Nantucket, had attended Vassar as had her mother and her aunt, Miss Florence Cushing. Earlier, when Professor Whitney had resigned as President in 1911, Mrs. Wilfred Lewis, a Vassar woman of Philadelphia, took the office. She was followed in 1915 by Miss Ellen M. Folsom of Boston, who had studied under Maria Mitchell. When she died in 1926, Miss Alice M. Howland of Hope, Rhode Island, also a former Vassar student, held office until Mrs. Davis' election in 1930. Margaret Davis served longer than any other president, from 1930 to 1947; and when C. Neal Barney, the man she had chosen to succeed her, died unexpectedly, she again took on the responsibility from 1949 until 1954. She kept a loose rather than a tight rein on the organization, so that the staff had greater

autonomy than they had ever had before, but she spent long summers on Nantucket, and gave generously of her time and money to promote the activities of the Maria Mitchell Association.

During the depression years spending had to be curtailed drastically, as the Treasurer, C. R. Hinchman, often reminded the staff, but Miss Harwood continued her astronomical work essentially as she had in the past, gathering material for her study of variable stars in the Scutum Cloud of the Milky Way. Using the help of an occasional Nantucket boy or girl who showed particular promise, as well as more professional assistants when special grants made it possible, she created a warm atmosphere at the Observatory both for Nantucketers and for summer residents and visitors. Her teaching, her lectures, and her "Open Nights" for the public contributed to this, and she showed both imagination and enthusiasm in her work with young people.

In Grace Wyatt the Natural Science Department also found a Director of great energy, a friendly person quite able to handle the popular aspects of the program, and one with the ability to encourage such scientific work as could be done in the short summer season. In her shy but dynamic way Miss Wyatt managed to transmit to adults and children alike her tremendous exuberance over flowers, birds, shells, mosses, ferns, and butterflies. Perhaps if one were to say that as far as the staff was concerned, Mrs. Albertson set the program of the Maria Mitchell Association for the first decade, and Miss Harwood's work in astronomy dominated its development during the second and third decades, then it would probably be right to credit Miss Wyatt with responsibility for the principal expansion of the Association in the fourth and fifth decades of the Association's first half century.[19]

In the matter of staff housing, Miss Wyatt wanted to be nearer the center of things than in the rooms which the Association rented for her and her assistants, so in 1933 the Managers built her a modest apartment wing at the back of the Memorial House, even though there were no capital funds available for the purpose and no hope of raising such money during the depression. For the first time in the history of the Association, the Managers borrowed the money to build, and then in three years paid off the $1500 which the apartment had cost, with the income they would have otherwise spent for room rent.

Each summer of her long tenure, from 1933 to 1950, Miss Wyatt came up from her college teaching in the South and threw herself with enthusiasm into the work in Nantucket. She encouraged other scholars in their study and publication of Nantucket material. S. N. F. Sanford, Curator of Invertebrates of the Boston Society of Natural History, helped her plan a program of scientific activity. Charles P. Kimball collected Nantucket moths. Emil F. Guba and Edgar V. Seeler worked on fungi. Mabel A. Rice, who came as Assistant Director in 1939, studied mosses, lichens, and other plants of the Island. Some of these studies, such as Mabel Rice's, *The Trees and Shrubs of Nantucket,* were issued as special publications by the Association; others appeared in scientific journals.

Miss Wyatt also promoted the popular work in Natural Science with great success. Day after day she got up at four in the morning to collect wild flowers, in order to arrange and label them before the Memorial House opened at ten. In 1934, for instance, she had an average of seventy-five different flowers and grasses on daily display. Children's classes, public lectures by her staff and by visitors, bird walks, and nature walks occupied her department's time. She even conducted a group of 250 people through the Hidden Forest in 1938, in the days when that unique Nantucket woods was open to the public.

It is no wonder that with all this going on, Miss Wyatt dreamed of securing more adequate quarters for the Natural Science Department than the crowded kitchen and back rooms of the Memorial House. And eventually her dream came true. Mrs. Hinchman had bought from the Woodbridge family the large Thomas Coffin house located on the southwest corner of Milk and Vestal Streets, when it came on the market in 1929, in order to protect the Memorial House, and the Library which stood next to the back garden of the house. She furnished it so that her children, grandchildren, and great-grandchildren might use it in the summer, and deeded it to her son C. Russell Hinchman for this purpose, with the request that upon his death it should go to the Maria Mitchell Association.

Lydia Hinchman herself died in 1938 in her ninety-third year, and was praised in a minute prepared by Margaret Harwood at the next annual meeting of the Association as one whose vision, help, and encouragement had been largely responsible for the existence and development of each department of Nantucket's living memorial to Maria Mitchell. And Mrs. Hinchman's final contribution to the Association came sooner than she had anticipated. Russell Hinchman's health began to fail in the early 1940s. In 1943 he had the Managers shift the responsibility of investing the endowment funds, which now amounted to nearly a quarter of a million dollars, from the Treasurer to the Fiduciary Trust Company in Boston. He also resigned his treasurership, and died within a year. In his will he left the Milk Street house, as he had been directed to do, to the Maria Mitchell Association, and in August, 1944, the Managers accepted the gift and named it the "Lydia S. Hinchman House, in honor of Mr. Hinchman's mother." Thus was fulfilled Miss Wyatt's dream of having proper space for the many activities of the Natural Science Department. The building opened in 1945 as headquarters of the Department and a museum of natural science. No longer would children's nature classes have to be held in the Library or in the Town's distant Cyrus Peirce School, as Miss Wyatt had finally done in desperation in 1944.

While the work in Natural Science increased during the Second World War, with summer people coming to Nantucket in larger numbers than usual because they could not go abroad, that in Astronomy suffered disruption because of the war, as it had in 1917-18. At first Margaret Harwood devoted a good deal of her time to teaching navigation to the young Coast Guardsmen stationed on Nantucket, but finally she left the Island and spent 1944, 1945 and 1946 in Cambridge, working at the Radiation Laboratory of the Massachusetts Institute of Technology. The Observatory remained open to the public

The Lydia S. Hinchman House — Natural Science Museum, acquired by bequest, 1944

each summer, however, in the care of Alvin E. Paddock, while friends of Miss Harwood, such as Helen Wright, who was doing research in Nantucket in 1946 for her biography of Maria Mitchell, assisted him by giving public lectures and helping at Open Nights.

The Library grew more slowly after the concrete fireproof wing opened in 1933, for the book funds almost dried up during the Depression. Dampness at first plagued the basement of the new structure. The Library Committee closed the building entirely in the winter of 1936-37 to save money, and again the next year. An attempt to attract school children by opening the reading room two afternoons a week during the winter failed in 1938-39 and again the next year. The chairman of the Library Commitee, the distinguished retired journalist, Charles A. Selden, became so discouraged that he recommended to the Board of Managers that the building be turned over to the town for a kindergarten, in order to make it useful to Nantucket children. The Managers fortunately rejected the idea, and in 1940 employed a new, professionally trained librarian, Miss Ruth A. Pitkin. She revised the cataloguing system to conform to standard library practice, and re-invigorated the Library. Wartime classes in navigation and home nursing met regularly in the building during the winters. In 1942 Mrs. Allen E. Norcross of Nantucket, became Librarian, and under her friendly and competent direction, the Library has grown in usefulness year by year. With special funds contributed by Mr. and Mrs. Francis W. Davis, Mrs. Norcross built up the children's book section, and increasingly the schools sent their pupils to the Library in the wintertime to work on reports for science classes. After the war, attendance and circulation, summer and winter, increased steadily.

When Mrs. Davis persuaded C. Neal Barney to take her place as President in 1947, she chose a man who had long been connected with the Association. The fact that his grandmother was Sally Mitchell, a younger sister of Maria, made him a great-nephew of the astronomer. As a lawyer he had been the Association's counsel since 1905. He had served on the Finance Committee from 1905 to 1931. He had been elected a manager in 1944, and vice-president in 1946. He lived in Scarsdale, New York, and had bought a summer home up on the Cliff at Nantucket in 1946. If the President was to be a man, rather than a woman, no one could have been more suitable than Neal Barney. He served graciously and ably for a short term, but his sudden death in 1949 left no one prepared to take the presidency except Mrs. Davis, who resumed the office reluctantly but with her customary zeal. Not only did she increase her contributions to the children's book fund in the Library, but she and her husband, together with some friends, gave a new dome for the Observatory as a memorial to their late son, Cushing Davis, when in 1951 the original copper dome became unsafe.

When Miss Harwood returned to Nantucket after the war, and after she had got the telescopes and photographic plates back into shape and free of the accumulated corrosion of Nantucket's salt-laden air, she resumed her work for the public and her research on variable stars. She had established close connections with the Leiden Observatory, where similar studies were in progress. In 1948 she visited Leiden as well as Zurich and some British observa-

tories, and in 1950 she reported that Gustav Bakôs of Leiden was collaborating with her in bringing her variable star data into publishable form. Grants from the Office of Naval Research, beginning in 1950, helped her employ assistants here also. Then in 1947 Miss Harwood had persuaded Professor Dirk Brouwer, Director of the Yale Observatory, to join the Board of Managers of the Association, and Dr. Brouwer gave her some of the support and encouragement which Edward Pickering, Solon Bailey, Harlow Shapley and others at Harvard had done through the years. In 1952 Margaret Harwood visited European observatories and attended meetings of the International Astronomical Union in Rome, as she had often done earlier — in 1928 in Leiden, 1932 in Cambridge, Massachusetts, 1935 in Paris, and 1948 in Zurich. Again in 1955, as always with the encouragement of her Board of Managers, she went to the International Astronomical Union sessions in Dublin, and to meetings of British astronomers in Scotland and England.

In 1953 death took Miss Harwood's oldest helper in the Observatory, her "mechanical assistant," Alvin E. Paddock. An expert Nantucket carpenter, he had begun work on the Birthplace when it was first renovated in 1903. In the years that followed he took the Maria Mitchell Association under his wing in other areas than carpentry, contributing much from his knowledge of nature and Nantucket, helping with the "Moon Evenings" from the beginning, learning to care for the telescope, and eventually making himself invaluable in the mechanical and observational work of the Observatory. His passing marked the end of an era, in a sense, although such was the interest and loyalty which the Maria Mitchell Association has always been able to command, that other people, Islanders and Off-islanders, have always volunteered to help with the many routine as well as technical jobs which had to be done on Vestal Street.

The year 1949 marked the appearance of a definitive life of Maria Mitchell, *Sweeper in the Skies,* by Helen Wright.[20] This book, which had begun as an undergraduate interest of Miss Wright's when she was at Vassar, gave both breadth and depth to the extraordinary personality of Maria Mitchell and her life on Nantucket and at Poughkeepsie. It also provided inspiration to the new generation of supporters of the scientific and educational programs of Nantucket's memorial to America's first woman astronomer.

After a short interim following Miss Wyatt's retirement by reason of bad health in 1950, Dr. Edwin M. Betts, of the Biology Department of the University of Virginia, took over the Natural Science Department in 1951. He expanded the summer classes for children, and with the encouragement of Philip B. Heywood of the Board of Managers, and the financial assistance of MacMillan Clements of Nantucket, he converted the basement of the Hinchman House into classrooms for rainy weather. Dr. Betts, who with his wife, Mary Hall Betts, was particularly interested in early American gardens, houses, and furniture, gave the Hinchman House some of the dignity and manner of a Nantucket colonial dwelling. He also expanded the lecture program so that instead of having an occasional summer lecture in Natural Science, the Department provided one every Friday evening in the Library followed by a reception in the Hinchman House.

As Director of the Natural Science Department, Dr. Betts had the strong support of a vigorous Committee, one of whose most interested members was Alice Albertson Shurrocks. After her husband died, Mrs. Shurrocks had returned as Curator of the Memorial House from 1946 through 1948, and although she never again took full responsibility for the work in Natural Science, as she had in earlier years, her interest and enthusiasm remained unflagging. Mrs. Shurrocks' long acquaintance with the work of the Association made her in these later years a kind of oracle in its affairs, for after the death of her cousins Walter Hinchman and Margaretta Hinchman in 1955, she remained the sole survivor of the children of the Association's founders.[21]

These last years of the Maria Mitchell Association's first half century witnessed significant changes in its orientation. By 1953 the principal committees had ceased to give reports to the Annual Meeting, but had delegated this task to the staff. Two years later the site of the Annual Meeting shifted from Boston to Nantucket. In 1954 the Astronomical Fellowship Committee ceased to report on the Pickering Fellows at Harvard, and henceforth, as the "Astronomical Committee," concerned itself exclusively with the affairs of the Nantucket Observatory.

Walter S. Hinchman's death in 1955, and the resignation of his son, Richard M. Hinchman, as Treasurer in 1954 after serving for five years, removed the last members of the Hinchman family from positions of immediate influence in the Association. Walter Hinchman's guidance had been important in the years after his mother and brother died, for as Vice-President he had counseled closely with the President, the staff, and other members of the Board. Fortunately, before his health failed, he was able to give something of his experience and counsel to the excellent new President who took office in 1954. For Mrs. Davis and Miss Harwood had persuaded Charles G. Snow, General Superintendent of the Nantucket Gas and Electric Company, to take the presidency. Mr. Snow's technical training and administrative experience made him particularly suitable for the position of President in these years in which the Association's activities continued to increase in size and complexity.

The new President's first and most important task was that of finding a successor for Miss Harwood, whose retirement had originally been planned for 1955 but subsequently had been postponed for two years in order to give her more time to get her variable star material ready for publication.[22] With the encouragement of Mr. Snow and the Board of Managers, Dr. Brouwer, as chairman of the Astronomical Committee, drew up a prospectus and work program designed to attract a competent woman astronomer in this period when women astronomers were comparatively few and astronomers in general in considerable demand. They circularized the field, and eventually secured the services of Miss Dorrit Hoffleit, a Radcliffe Ph.D., whom Miss Harwood had known at the Harvard Observatory, and who had recently undertaken research work at Yale. Under the new arrangement, Miss Hoffleit was to spend six months working for the Maria Mitchell Association, from May to October, and six months at Yale, and the Maria Mitchell Association and Yale University would share equally in paying her salary. By this means the Association found someone to carry on its work in Astronomy on a highly professional level.

Thus on June 1, 1957, Margaret Harwood retired after forty-five years of devoted service. In recognition of her achievements, her alma mater, Radcliffe College, in 1957 at the 50th reunion of her class, gave her a Graduate Chapter Medal, and in 1961 the American Astronomical Society awarded her its Annie J. Cannon Medal, established in 1933 to honor meritorious women astronomers. Fifty years before Miss Harwood's retirement the Observatory had been established; six years before that the Maria Mitchell Association had been founded. Thus this change of directorship at the Observatory marked the end of something more than a full half-century.

As we look back over the history of this first epoch in the life of the Nantucket Maria Mitchell Association, the story we have told has focused mainly on the few people who provided its leadership and direction in the formative years. Many others also worked with singular devotion — officers and staff, committee members and volunteers, professional people and amateurs, craftsmen, scientists, Islanders and Off-islanders, young and old — literally hundreds of people through the years joined in supporting this memorial to Nantucket's great woman astronomer, and in promoting a distinctive scientific and educational enterprise on the Island. The number and the variety of these people who became involved testify to the validity of this idea of a living memorial to Maria Mitchell on Nantucket.

The second half-century will present greater challenges to the Association than did the first. More people will use its facilities. Interest in Natural Science will grow to a degree that the founders could hardly have imagined. An emerging interest in the preservation of the fragile and precious natural resources of the Island will present a challenge to service in this vital area. And in Astronomy the necessity of developing a program which will continue to command the respect of astronomers as well as to meet the popular educational needs of the people of the Island will require the best ingenuity and the largest resources that the Association can muster. With vision, judgment, ability, and energy such as characterized the founding and development of the organization, the Nantucket Maria Mitchell Association will meet the challenge and assure the continued excellence of Nantucket's unique scientific center.

NOTES

(1) For a full and lively account of Maria Mitchell's career, see Helen Wright, *Sweeper in the Sky*. (New York, The Macmillan Company, 1949, fourth printing, published by the Nantucket Maria Mitchell Association, 1959). A brief outline of her life may be found in the "Chronological Record" published in the *Annual Report* of The Maria Mitchell Association.

(2) Grace Brown Gardner, Scrapbook, No. 30, "The Nantucket Maria Mitchell Association." Nantucket newspaper clippings dated November 11, 1890, July 18, 1891, and August 2, 1891. In private possession.

(3) *Ibid.* Undated clipping from the Nantucket *Inquirer* and *Mirror* containing a report of a talk by Margaret Harwood for the Nantucket Rotary Club in the 1950s.

(4) *Recollections of Lydia S. (Mitchell) Hinchman*. (Privately printed, 1929), pp. 93-94.

(5) Dr. Mitchell later gave the Dolland telescope to the Association outright.

(6) The principal sources for this study are to be found in the manuscript minutes of the Association and the Board of Managers, in the printed *Annual Reports* and in other manuscripts and printed materials on file in the Maria Mitchell Library.

(7) Letter from Walter S. Hinchman to Constance La Boiteaux Drake, July 14, 1952. In private possession.

(8) Grace Brown Gardner, Scrapbook, No. 30.

(9) For a report on the Carnegie matching gift, see *Annual Report*, 1911, pp. 19-20.

(10) Lydia S. Hinchman letter to Margaret Harwood, Philadelphia, March 18, 1912, in file box, "Maria Mitchell Observatory, Letters from Mrs. Albertson, Mrs. Hinchman, Miss E. R. Mitchell, 1912-1930 incl." Maria Mitchell Library.

(11) *Annual Report*, 1913, p. 21.

(12) In the house at number 5 Milk Street.

(13) The publisher of this 442-page volume was G. P. Putnam's Sons, New York.

(14) Beginning with 1925 these assistants, known as "Lydia S. Hinchman Fellows," included Margaret L. Walton, Doris Wood, Jenka Mohr, Marjorie Williams, Helen W. Dodson, Helen Wright and others. All later made significant contributions to science.

(15) See Miss Harwood's interesting accounts of the 1925 eclipse in the *Annual Report*, 1925, pp. 17-25, and in *Popular Astronomy*, XXXIII (1925), pp. 344-349.

(16) Sold in 1950 as impractical to maintain.

(17) MS. Minutes of the Board of Managers, Book #3, August 2, 1929.

(18) Interview with Miss Margaret Harwood, July 28, 1964.

(19) Walter S. Hinchman letter, July 14, 1952.

(20) Published by The Macmillan Company, New York.

(21) Mrs. Shurrocks died in 1967.

(22) This work appeared in part in Margaret Harwood, "The Variable Stars in the Scutum Cloud," in *Annals of the Leiden Observatory*, XXI (1962) 387-464.