Mary E. Byrd

By LOUISE BARBER HOBLIT

Another pioneer in the college teaching of astronomy has passed on. Mary E. Byrd died quietly, almost forgotten, in Lawrence, Kansas, on the thirtieth of July, 1934. Passionately devoted to the science and teaching of astronomy, she was yet for twenty-eight years barred by the very intensity of her devotion to principle and integrity of thought from carrying on the work that was her very life.

Her indomitable spirit thrived from the first on difficulties. Her father, a Congregational minister and a staunch abolitionist, moved his family to Kansas in 1855 when Mary was six. She was ten before any school opportunity came her way, yet four years later she was teaching elementary classes in the school where she studied. College entrance presented many difficulties to women in those early years and, in addition, Mary Byrd earned her college education not once but again and again as one calamity followed another in Kansas and family needs were met first.

After a year and a half at Oberlin College and several years of teaching she entered the University of Michigan as a junior and was graduated with the degree of A.B. in 1878. During these two years at Michigan she found herself one of a group of earnest young women who were pioneers in coeducation. Of these Alice Freeman, afterward Mrs. Palmer, became perhaps the best known, but it is said that in their discussions of the serious questions of the day Mary Byrd was noted for her comprehensive grasp of ideas and inflexible moral standards.

After graduation came four years of high school work, three of them as high school principal, followed by a year of study at Harvard College Observatory under Dr. Edward C. Pickering. From 1883 to 1887 Miss Byrd taught mathematics and astronomy at Carleton College, and under the supervision of Professor W. W. Payne sent out time signals twice daily over ten thousand miles of railway. She received the degree of Doctor of Philosophy from Carleton College in 1904.

She left Carleton College in 1887 to accept the directorship of the new observatory then recently built at Smith College. Here, for nineteen years she taught and worked. Her great contribution to college teaching lay in working out a method for teaching general astronomy as a laboratory science. She believed in taking her students out of doors and in leading them to see and to interpret for themselves what was spread out before them there. For this a textbook was needed, and in 1899 she published her "Laboratory Manual in Astronomy," followed in 1913 by "First Observations in Astronomy," both by Ginn and Co. Few teachers have held their students more rigorously to accurate thinking and scientific method.

Her own technical work in astronomy included mounting, testing, and

adjusting instruments and the definitive determination of the latitude and longitude of the Observatory, this latter requiring a "longitude campaign" with the Harvard College Observatory. The results are published in volume XXIX of the "Annals of Harvard College Observatory." Her special research interest lay in fixing positions of comets by micrometer measures of their distance from known stars, and few comets bright enough to be visible in the 11-inch equatorial telescope at Smith College escaped her. Reports of these investigations were published either in the *Astronomical Journal* of Cambridge, or in the *Astronomische Nachrichten* of Kiel, Germany. She was a member of the American Astronomical Society, the Astronomical Society of the Pacific, and the British Astronomical Association.

At the height of her usefulness to the college she resigned. The blood of martyrs was in her veins and she had to make what protest she could against what seemed to her an ominous tendency in higher education. In accepting large sums from the various educational foundations she felt that colleges and universities limited in a measure their freedom of expression on economic problems. In tendering her resignation to the Board of Trustees she stated clearly the conflict in her own mind, her own questionings as to the methods by which certain large personal fortunes were built up, and her own need for protest, even at sacrifice of her position, against such sources for college funds. Few felt as she did, but all who knew her respected the spirit in which her resignation was offered.

As one friend has written recently: "The world has gone farther than ever on the road Miss Byrd would not travel. How mild and simple it seems to look back on it—life then—but I suppose the foundations were being laid for our toppling structure." And another has written: "She was one in thousands. I think that if more of the people of our country could have seen as she did this wretched depression would have been avoided." And a colleague, years ago, asked: "Why has Mary Byrd a right to a better conscience than the rest of us?"

Perhaps the answer to this last question lies in all her ancestry and inherited traditions as well as in the early environment in "Bloody" Kansas. Her father was great-great grandson of Reverend Timothy Edwards, father of that Edwards who, when driven for righteousness' sake into the wilderness from the church at Northampton where he had preached twenty-four years, wrote "The Freedom of the Will." Mr. Byrd's grandfather was a Revolutionary soldier at the battle of the Brandywine. Miss Byrd's mother, before marriage Elizabeth A. Low, was descended from John Endicott, early governor of Massachusetts. She was a granddaughter of the Revolutionary soldier, Eliphalet Perley, and great granddaughter of Asa Perley, a member of the provincial Congress. One of her brothers, David Low, in early days a prominent judge in Kansas, served in Congress one term, but did not seek re-election because he found "politics and ideal honesty incompatible."

Miss Byrd had rare personal qualities. Interest in people and in all