

CHAPTER XIX

When I began my second year at the Gilman school, I was full of hope and determination to succeed. But during the first few weeks I was confronted with unforeseen difficulties. Mr. Gilman had agreed that that year I should study mathematics principally. I had physics, algebra, geometry, astronomy, Greek and Latin. Unfortunately, many of the books I needed had not been embossed in time for me to begin with the classes, and I lacked important apparatus for some of my studies. The classes I was in were very large, and it was impossible for the teachers to give me special instruction.

Miss Sullivan was obliged to read all the books to me, and interpret for the instructors, and for the first time in eleven years it seemed as if her dear hand would not be equal to the task.

It was necessary for me to write algebra and geometry in class and solve problems in physics, and this I could not do until we bought a braille writer, by means of which I could put down the steps and processes of my work. I could not follow with my eyes the geometrical figures drawn on the blackboard, and my only means of getting a clear idea of them was to make them on a cushion with straight and curved wires, which had bent and pointed ends. I had to carry in my mind, as Mr. Keith says in his report, the lettering of the figures, the hypothesis and conclusion, the construction and the process of the proof. In a word, every study had its obstacles. Sometimes I lost all courage and betrayed my feelings in a way I am ashamed to remember, especially as the signs of my trouble were afterward used against Miss Sullivan, the only person of all the kind friends I had there, who could make the crooked straight and the rough places smooth.

Little by little, however, my difficulties began to disappear. The embossed books and other apparatus arrived, and I threw myself into the work with renewed confidence. Algebra and geometry were the only studies that continued to defy my efforts to comprehend them. As I have said before, I had no aptitude for mathematics; the different points were not explained to me as fully as I wished. The geometrical diagrams were particularly vexing because I could not see the relation of the different parts to one another, even on the cushion. It was not until Mr. Keith taught me that I had a clear idea of mathematics.

I was beginning to overcome these difficulties when an event occurred which changed everything.

Just before the books came, Mr. Gilman had begun to remonstrate with Miss Sullivan on the ground that I was working too hard, and in spite of my earnest protestations, he reduced the number of my recitations. At the beginning we had agreed that I should, if necessary, take five years to prepare for college, but at the end of the first year the success of my examinations showed Miss Sullivan, Miss Harbaugh (Mr. Gilman's head teacher), and one other, that I could without too much effort complete my preparation in two years more. Mr. Gilman at first agreed to this; but when my tasks had become somewhat perplexing, he insisted that I was overworked, and that I should remain at his school three years longer. I did not like his plan, for I wished to enter college with my class.

On the seventeenth of November I was not very well, and did not go to school. Although Miss Sullivan knew that my indisposition was not serious, yet Mr. Gilman, on hearing of it, declared that I was breaking down and made changes in my studies which would have rendered it impossible for me to take my final examinations with my class. In the end the difference of opinion between Mr. Gilman and Miss Sullivan resulted in my mother's withdrawing my sister Mildred and me from the Cambridge school.

After some delay it was arranged that I should continue my studies under a tutor, Mr. Merton S. Keith, of Cambridge. Miss Sullivan and I spent the rest of the winter with our friends, the Chamberlins in Wrentham, twenty-five miles from Boston.

From February to July, 1898, Mr. Keith came out to Wrentham twice a week, and taught me algebra, geometry, Greek and Latin. Miss Sullivan interpreted his instruction.

In October, 1898, we returned to Boston. For eight months Mr. Keith gave me lessons five times a week, in periods of about an hour. He explained each time what I did not understand in the previous lesson, assigned new work, and took home with him the Greek exercises which I had written during the week on my typewriter, corrected them fully, and returned them to me.

In this way my preparation for college went on without interruption. I found it much easier and pleasanter to be taught by myself than to receive instruction in class. There was no hurry, no confusion. My tutor had plenty of time to explain what I did not understand, so I got on faster and did better work than I ever did in school. I still found more difficulty in mastering problems in

mathematics than I did in any other of my studies. I wish algebra and geometry had been half as easy as the languages and literature. But even mathematics Mr. Keith made interesting; he succeeded in whittling problems small enough to get through my brain. He kept my mind alert and eager, and trained it to reason clearly, and to seek conclusions calmly and logically, instead of jumping wildly into space and arriving nowhere. He was always gentle and forbearing, no matter how dull I might be, and believe me, my stupidity would often have exhausted the patience of Job.

On the 29th and 30th of June, 1899, I took my final examinations for Radcliffe College. The first day I had Elementary Greek and Advanced Latin, and the second day Geometry, Algebra and Advanced Greek.

The college authorities did not allow Miss Sullivan to read the examination papers to me; so Mr. Eugene C. Vining, one of the instructors at the Perkins Institution for the Blind, was employed to copy the papers for me in American braille. Mr. Vining was a stranger to me, and could not communicate with me, except by writing braille. The proctor was also a stranger, and did not attempt to communicate with me in any way.

The braille worked well enough in the languages, but when it came to geometry and algebra, difficulties arose. I was sorely perplexed, and felt discouraged wasting much precious time, especially in algebra. It is true that I was familiar with all literary braille in common use in this country—English, American, and New York Point; but the various signs and symbols in geometry and algebra in the three systems are very different, and I had used only the English braille in my algebra.

Two days before the examinations, Mr. Vining sent me a braille copy of one of the old Harvard papers in algebra. To my dismay I found that it was in the American notation. I sat down immediately and wrote to Mr. Vining, asking him to explain the signs. I received another paper and a table of signs by return mail, and I set to work to learn the notation. But on the night before the algebra examination, while I was struggling over some very complicated examples, I could not tell the combinations of bracket, brace and radical. Both Mr. Keith and I were distressed and full of forebodings for the morrow; but we went over to the college a little before the examination began, and had Mr. Vining explain more fully the American symbols.

In geometry my chief difficulty was that I had always been accustomed to read the propositions in line print, or to have them spelled into my hand; and somehow, although the propositions were right before me, I found the braille confusing, and could not fix clearly in my mind what I was reading. But when I took up algebra I had a harder time still. The signs, which I had so lately learned, and which I thought I knew, perplexed me. Besides, I could not see what I wrote on my typewriter. I had always done my work in braille or in my head. Mr. Keith had relied too much on my ability to solve problems mentally, and had not trained me to write examination papers. Consequently my work was painfully slow, and I had to read the examples over and over before I could form any idea of what I was required to do. Indeed, I am not sure now that I read all the signs correctly. I found it very hard to keep my wits about me.

But I do not blame any one. The administrative board of Radcliffe did not realize how difficult they were making my examinations, nor did they understand the peculiar difficulties I had to surmount. But if they unintentionally placed obstacles in my way, I have the consolation of knowing that I overcame them all.