

The following pages are from the book
"The launching of Duke University, 1924-1949,
by Robert F. Durden

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In the final analysis, perhaps the major obstacle in the way of attracting outstanding figures such as [the physicist] Compton was one that [Duke president] Few struggled valiantly but futilely to overcome: the lack of adequate endowment for Duke University. Officials at the Rockefeller Foundation held that view, which they privately conveyed to Few, and he believed that somehow Compton too had been made aware of the foundation's appraisal. Few, at any rate, seized the occasion to advise William R. Perkins that he wished soon to discuss the whole matter with Perkins, Allen. and, if possible, Mrs. James B. Duke.⁷³ Few had no way of knowing, of course, that events soon to take place on Wall Street in October, 1929, would make further discussion of adding to Duke's endowment highly moot for quite a long period.

Although the physics department had not yet been set up on the "new

university basis," as Few put it, physics had to be taught to a significant number of students. To help in that task, the department in 1929 added David W. Carpenter as an instructor. A native North Carolinian who received three degrees from Duke—bachelor of science, master of science, and Ph.D.—Carpenter soon became the department's supervisor for freshman studies and for many years would fill that post in a highly conscientious and effective fashion.

The following year, 1930, Frank Woodbridge Constant joined the department. A Princeton undergraduate, he had received his doctorate at Yale and taught briefly at the California Institute of Technology before coming to Duke. And although Few found that even providing the sometimes expensive laboratory facilities for promising experimental physicists could be a problem, another was added in 1932. James Carlyle Mouzon came to Duke the same year he received his Ph.D. from the California Institute of Technology. Mouzon had been an undergraduate at Southern Methodist University and was the son of a prominent Methodist bishop who was a close friend of Few's. In advising the bishop about the situation in physics at Duke, Few noted that Duke had an excellent "college department, with a staff adequate in number, I think, and thoroughly first-rate for college physics." Some of the young experimental physicists on the staff had promise, if the university could

provide the facilities they needed, but the attempt to lure Compton to Duke had failed. Consequently, Few continued, Duke was experimenting with "young men of the highest promise, in the hope of developing some of them into distinguished physicists." They were not paid much at first, and their only hope for advancement was "through work of the highest order."⁷⁴ No doubt fully apprised of the situation by his father, young Mouzon accepted the challenge that Few had described and began his distinguished career at Duke, although he would leave the university for other opportunities during and after World War II.

A lucky windfall brought Hertha Sponer, one of the top women physicists in the world, to Duke in 1936. Born in Germany in 1895, Sponer received her doctorate from the University of Göttingen in 1920, studied for a year at the Kaiser-Wilhelm-Institut, and returned to Göttingen to teach. The publication in 1925 of her study of molecular spectra and their application to certain chemical problems, along with other scholarly papers, helped place her in the front ranks of women physicists. When Hitler's Nazis came to power in Germany, however, Sponer found her academic and scientific future jeopardized. She was not Jewish, but the Nazis frowned on women in academic posts (rather than in the home, having babies), and Sponer fled Germany in 1934 to teach at the University of Oslo in Norway.⁷⁵

An official of the Rockefeller Foundation, which sponsored a program to assist displaced German scholars, informed Edwards in late 1933 of Sponer's possible availability. Edwards strongly endorsed the idea of trying to secure Sponer, though how others in the department felt about the matter is not known. A woman historian at Duke who had known Sponer in California reported that, aside from speaking English fluently, Sponer, of all the German women she had known, "fitted most successfully into an American academic atmosphere." Along with "feminine charm," she was said to have "a distinctly academic outlook and attitude, and a thorough appreciation of the problem of 'fitting in.' " In short, Sponer was described as "everything that one could look for in an academic woman."⁷⁶

Few and Wannamaker, possibly because of the continuing governance problem in the physics department, may at first have dragged their feet a bit about Sponer. Wannamaker, as noted earlier, described the department about this time as a "no-man's land" that lacked direction and a situation into which he hesitated to bring any young scholar. Nevertheless, in the spring of 1935, the administrators authorized Edwards to invite Sponer to come to Duke that fall. Because she had work that she wished to complete at Oslo, Sponer asked, and Duke agreed, that she be allowed to come in the spring of 1936. Not many

weeks after her arrival, Few informed the Rockefeller Foundation that since Duke liked Sponer, and vice versa, the university would, with partial help from the foundation for three years, like to keep her. "We are glad to have a scholar of her standing and promise," Few declared. The foundation promptly agreed to help, and Hertha Sponer threw in her lot with Duke.⁷⁷

One of the many persons from whom Few sought advice about Duke's problems in physics was Robert A. Millikan of the California Institute of Technology. Not long after the people at Duke had made their positive assessment of Hertha Sponer, Millikan advised, among other things, that in "introducing young blood into a department of physics" he should expect to go farther in influence and get more for his money if he "picked one or two of the most outstanding younger men, rather than if I filled one of my openings with a woman."⁷⁸

Unfortunately for Few's reputation among feminists, he remained, in replying to Millikan, very much a male of his era. Admitting that he mainly agreed with Millikan's position, Few explained that Duke had a coordinate college for women, and from the spokesperson of the relatively few women on the faculty (Alice Baldwin) came a "constant pressure to have brought in a small number of more distinguished women." Help from the Rockefeller Foundation had made Sponer's case

easier, and she was, of course, Few concluded, "like the other women on the Womans College foundation."⁷⁹ Just what that "foundation" was, Few did not explain, but it obviously gave him some sort of consolation to think there was such a thing.

While Few may well have later grown more fully to appreciate Sponer's presence at Duke, it did not, after all, solve the department's basic problem. And it was one with which Few and Wannamaker continued to wrestle. In 1935 Few returned to Duke's staunch friend and alumnus at Columbia, George Pegram, and asked if he could not find "a man in Physics of the caliber of Dr. Gross, whom you secured for us in Chemistry some years ago." Pegram replied that what Few requested was not an easy task, for he knew of only one person in physics of whom he was as certain as he had been about Gross, and that person was someone at Columbia whom Pegram wanted to keep there⁸⁰

Acting on advice from Gross, Few and Wannamaker next went after a rising young theoretical physicist named Edward Teller, who was also a refugee from Germany and was then at George Washington University in the nation's capital. When Teller declined Wannamaker's first offer, Few wrote him asking if he would be willing to come as a visiting professor for a year, with Duke paying his regular salary (\$4,400) plus \$1,000 for any additional expenses he might have. Few added that

Teller's schedule could be arranged so that he could spend three days in the middle of the week at Duke and have long weekends in Washington to keep up with the experiments he had going there. "At the present stage of the development in Physics here," Few somewhat plaintively concluded, "you could be of service to us and to the cause." Despite the entreaty, Teller responded that he simply could not spend so much time away from his work in Washington, but he hoped to continue to pursue the common research interests he held with Sponer and Nielsen.⁸¹

The situation in the department had become such that Charles Hatley took it upon himself in 1936 to write Wannamaker urging that Nielsen and Mouzon be promoted. Hatley argued that both men were doing work of the highest type, with Nielsen for all practical purposes supervising the graduate work in the department and Mouzon teaching graduate (as well as undergraduate) courses and directing theses. Yet after eleven years at Duke Nielsen was still an assistant professor and Mouzon an instructor. They could do their work no better if promoted, Hatley admitted, but it would put the department in a better light.⁸²

What Hatley did not explain, perhaps because he knew that Wannamaker well understood, was that students, especially graduate students, often became the indirect but quite real victims when departments developed problems such as physics had. The problems for students

could take many forms, but academia is full of stories, by no means all apocryphal, of graduate students who fail their qualifying examinations or their dissertation defense, at least initially, upon getting caught in the crossfire of feuding professors.

At any rate, by 1936 Few and Wannamaker obviously decided that they had been patient, humane, and politic long enough. Few quietly named a committee consisting of Wannamaker, Nielsen, and Hatley, to supervise the operations of the physics department and prepare the budget. Then, in 1937, Walter Nielsen was named chairman to replace Edwards, who continued teaching in the department until his retirement in 1944.⁸³

As Nielsen assumed the chairmanship, another important newcomer joined the department in the fall of 1937. Lothar Wolfgang Nordheim was another displaced German scholar who, as in many other such cases, enriched the United States as he fled Nazi Germany. With his Ph.D. from Göttingen in 1923, Nordheim was a theoretical physicist who taught at several universities in Germany and elsewhere in Europe before coming to the United States. At Purdue when Few invited him to come to Duke, Nordheim promptly accepted the offer. In his case also, Duke received temporary help from the Rockefeller-funded Emergency Committee in Aid of Displaced German Scholars. Nordheim was destined to play a

prominent role as a nuclear physicist at the Oak Ridge, Tennessee, laboratories during World War II and continued to add distinction to Duke's physics department long after the war.⁸⁴

Development of physics at Duke had been partially handicapped for about a decade. But with Nielsen as chairman and Sponer, Nordheim, and some of the younger members on the staff, the department was finally ready to move. World War II would, of course, interfere with that process, but the war had barely ended before Duke began making large, auspicious plans for its physics department.

Closely related to physics was the mathematics department. In Trinity College, for many years after 1891 the name of Robert L. Flowers was...
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References:

The Papers and Addresses of William Preston Few, edited, with a biographical appreciation, by Robert H. Woody (Durham, N.C.; Duke University Press, 1951), is a useful volume, and the biographical sketch of almost 140 pages is perceptive.All collections, unless otherwise noted, are in the Duke University Archives, W.R. Perkins Library.

William H. Wannamaker Papers. This large collection is divided into two parts, the correspondence file and the personnel file. The personnel file

deals largely with faculty appointments.....

73. Few to Perkins, September 20, 1929. Few Papers.

74. Few to Bishop E.D.Mouzon, February 20, 1932. Few Papers.

75. A thick folder on Hertha Sponer in the files of the Duke University News Service Biographies, University Archives, is a convenient source of information.

76. Warren Weaver of the Rockefeller Foundation to Edwards, December 8, 1933; Edwards to Few, May 1, 1934, and Dorothy L. Mackay to Alice Baldwin, June .11, 1934, Few papers.

77. Edwards to Sponer, March 25, 1935; Few to Sponer, April 27, 1935; Few to F.B. Hansom of the Rockefeller Foundation, March 7, 1936; and Hansom to Few, March 23, 1936, Few Papers.

78. R.A. Milliken to Few, June 24, 1936, Few Papers.

79. Few to Milliken, July 9, 1936, Few Papers

80. Few to Pegram, February 13, 1935, and Pegram to Few, February 16, 1935, Few papers.

81. Few to Pegram, January 12, 1937, for Gross's recommendation of Teller. Teller to Wannamaker, ca March 17, 1937; Few to Teller, March 18, 1937 and Teller to Few, March 25, 1935. Few Papers.

82. Hatley to Wannamaker, April 23, 1936, Wannamaker papers

83. Wannamaker to Flowers, July 15, 1936, Wannamaker papers,
84. Few to L. Nordheim, may 11, 1937, and Nordheim to Few, May 14, 1937, Few Papers.