



Herbert L. Hahn

HERBERT L. HAHN
(1893 – 1982)

INTERVIEWED BY
RUTH POWELL

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Subject area

Throop, Caltech Board of Trustees.

Abstract

An interview in four sessions, January 1981, with Pasadena attorney Herbert L. Hahn, a member of Caltech's Board of Trustees from 1955 through 1969, and a Life Trustee thereafter. He discusses the early history of Caltech at the turn of the 20th century—originally Throop Polytechnic Institute, then Throop College of Technology—as well as the capitalists and entrepreneurs who supported it financially at that time.

Describes his early associations and friendships with numerous Caltech trustees and benefactors as an attorney, and how he eventually became a Caltech Associate and later a trustee. He offers recollections of, among others, Robert Andrews Millikan, William Bennett Munro, Royal W. Sorensen, Arnold Beckman, Keith Spalding, Archibald Young, Scott Brown, Albert Ruddock, Philip Fogg, Edward Valentine, Henry Dreyfuss, and Thomas J. Watson Jr., detailing their various contributions to Caltech and to the Pasadena community

Administrative information

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CALIFORNIA INSTITUTE OF TECHNOLOGY ARCHIVES

ORAL HISTORY PROJECT

INTERVIEW WITH HERBERT L. HAHN

BY RUTH POWELL

PASADENA, CALIFORNIA

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ORAL HISTORY PROJECT

Interview with Herbert L. Hahn
Pasadena, California

by Ruth Powell

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POWELL: Would you like to begin by talking a little bit about Throop Polytechnic Institute and some of the people there?

HAHN: Yes. The period I remember about Throop Polytechnic Institute was from about 1906 until 1910, and that was the period I was in Pasadena High School. My impression of it as a poor boy was that Throop was a place that the rich boys went, because they had to pay tuition over there, and Pasadena High School was where the poor people went, who didn't feel they could pay the tuition. This didn't mean that the Throop students were any different than the students at Pasadena High School, of course, but nevertheless you always have those social differences that money brings with it.

Throop resulted from a movement that occurred, I suppose, around 1900 or a little earlier—that education should enable people to make a living, not simply as a cultural thing. And so we had many polytechnic high schools in those days, and Throop was one of them, where they would teach carpentry, mechanical drawing, the handling of machinery—things like that, which you might call training electricians, plumbers, carpenters, painters. This was the polytechnic idea of that day. Los Angeles had its Polytechnic High School and Manual Arts; and Long Beach had its Polytechnic High

School; and in Pasadena it was Throop. Pasadena High School did not offer any of that kind of education.

POWELL: Did this lead into [George Ellery] Hale's thinking about a school of engineering?

HAHN: I'm going to assume it did, because Hale was involved in Throop as a trustee at that time. You see, it was right in the middle of the period I speak of that the idea of the present Caltech originated, with Hale and that Board of Trustees, but that was the way of things. Even the colleges had prep schools in those days, because there weren't many high school graduates who were qualified to enter Harvard, let's say, and they had to have some education that would lead up to that, in order to get enough students for college. Pomona College had a prep school—meaning by that, a high school—and USC [University of Southern California] did, and I imagine all the rest of the colleges of that day, although Stanford did not. It originated at about the same time as Pomona and USC, Occidental, and so on, but there again, Senator [Leland] and Mrs. Stanford's idea was a polytechnic school, a school where your diploma would enable you to make a living by furnishing a service to the public.

POWELL: Caltech was a direct outgrowth of Throop, but this was due to Hale and some of the other men on the Throop Board of Trustees at that time.

HAHN: Yes, and added to it was the idea of superiority, not mediocrity, and Throop [Polytechnic Institute] was that way. It was an excellent high school, and it had women students as well as men. It taught homemaking, cooking, sewing, that kind of thing. My aunt Ida went there and studied that, in order to later become a teacher in Pasadena High School, where she taught home economics and things of that kind.¹

Of course, in earlier days Throop had an elementary school, but it was spun off [1910] into what is now the Polytechnic School, on California Street. But that was a

¹ Name was changed to the Throop College of Technology in 1913 and to the California Institute of Technology (Caltech) in 1920.—ed.

change that was going on in education in that period—shall we say the late 1880s and around the turn of the century—and Throop was a part of it. It evolved from being a first-class school of engineering and science, really, into being a college of a superior order.

POWELL: You did not know Hale personally when he was here?

HAHN: If I did know him, it was to shake his hand only. I have no recollection of personal involvement with Hale, although I did settle his estate after he died.

POWELL: At that time, you had contact with Mrs. Hale?

HAHN: That is it; and with his affairs, what his life had been. In accordance with California law, after there has been a death, one has to examine the contents of the safety deposit box. The State sends a representative to do that, to try to make sure that nothing escapes inheritance taxation. So, when we had our appointment with the county treasurer to have him come and examine the box, Mrs. Hale and I went there, and on my way down I passed a Greek candy store. In those days, I was very fond of some caramel-coated peanuts that you could buy very cheaply at the Greek candy shops, so I purchased a suitable amount of those and put them in my pocket. When we got to the box, I was quite astonished to see things I had not had previous contact with, and that was these international gold medals of 14- or 18-karat, the size of a praline. And they were heavy. This astonished me, and so I sat there in my wonderment, and Mrs. Hale and I ate peanuts, and strangely I guess had a good time.

POWELL: Do you remember about what time this was, what period?

HAHN: The late 1930s.

POWELL: Some of the other men who were on the board of the Throop Institute carried over to the Throop College of Technology. Would you like to mention just a little about Dr. Norman Bridge?

HAHN: Norman Bridge, as I recall it—and I did not know him personally, but so I read, or so somebody said—got his money through his acquaintanceship with Mr. [Edward L.] Doheny, the oilman. So Bridge had that money available for the purpose of giving to Throop, and it originated, really, from oil. He was a distinguished physician; but nevertheless, it was the oil that produced the money that enabled Bridge to help Throop. It's interesting, as I look at that original board, that it was money from natural resources that provided the money that enabled [Throop and then Caltech] to go forward. In the case of [Arthur H.] Fleming and in the case of C. W. Gates, it was cutting trees and milling them—the lumber business. With the Mudds and [L. D.] Ricketts, perhaps others, it was copper.

POWELL: Henry M. Robinson: Where did he get his—?

HAHN: Henry Robinson was a lawyer from Ohio, and he married, as I recall it, the daughter of one of the main owners of the Youngstown Sheet and Tube Company. Her family name was Arms, I believe, and they moved out here, for what reason I don't know. They had plenty of money to live on, and he went into the banking business and became president of one of the forerunners of what is now Security Pacific Bank. He was a confidential financial advisor to President Hoover while Mr. Hoover was in that office. He worked hard to develop people's interest in giving money to Caltech and was one of the principal movers, I am informed, in generating the Caltech Associates and forming it.

I remember an interesting incident with Harry Robinson. In the middle thirties, when financial affairs were pretty bad and lots of firms were failing, and the boards of directors of corporations then had—and still do have—a financial liability for any of their misdeeds, I was over visiting of an early evening with Harry Robinson, and I made a remark to him that I couldn't understand his being on so many boards of directors. I suspect he was on more boards of directors than any other person in Southern California. But I couldn't understand his being on them and guaranteeing and signing the acts of subordinates—signing papers prepared by subordinates the true facts of which he didn't know anything about himself. He brushed it off and said, “Oh, that's no matter.” At that time, he was president-director of the bank and a director of the [Southern California]

Edison Company and the Pacific Mutual Life Insurance Company and no end of others. Then shortly after that, Harry died [1937], and it was interesting that a suit was filed against the directors of the Pacific Mutual Life Insurance Company for some financial loss there, and the only reason Harry wasn't sued was because he had died. It's a good lesson for people to remember about going on boards of directors.

POWELL: Going back to these men and the money they had: You indicated that this came from natural resources.

HAHN: Yes.

POWELL: Do you want to comment a little on that?

HAHN: Yes. The emphasis in those days was on the outdoors—the Teddy Roosevelt type—and big fortunes were so much all the result of natural resources. An example of that was where Mrs. Eudora Hull Spalding's fortune came from, it came from iron mines. Her father, Morton Hull, was a lumber merchant in Chicago in the 1880s and had purchased a tract of land with timber up in Minnesota. He employed a timber cruiser named Alworth to go up there and tell him and his partner—who, incidentally, was a man named Boeing, which is well known now—how much timber they could cut off that land. Alworth did this, and in those days, he would have had to go by horseback or cart through the forest and guide himself by a compass. And he reported back to them that as he drove, his compass kept spinning around, and there must be iron underneath that land, and not to ever sell the land after they had cut the timber from it. This is what they did. In gratitude for Alworth's honesty, they gave him a third interest in the land, but not the timber. The location of this property turned out to be in the middle of the Hibbing Iron Pit, in the iron range in Minnesota. Also, that's the origin of the fortune that became the Boeing airplane company. This was typical.

Arthur Fleming had the Sugar Pine Lumber Company, up towards Yosemite, and he is the one who pledged his fortune in order to get Dr. [Robert Andrews] Millikan to come to Caltech [full-time, in 1921] and to make sure that Millikan would have adequate financing. Again, Charles Warner Gates, in the 1880s, along with two other men who

were in Davenport, Iowa, decided to float down the Mississippi River and get off in Arkansas where there was timber and, again, to cut trees and mill them and sell the lumber. This is what Gates and his partners [E. S.] Crossett and [J. W.] Watzek did. Then, in the early part of the present century, Gates and his wife and four children moved to South Pasadena, and he became interested in Throop. Whether Gates interested Fleming or Fleming interested Gates, they both being in the lumber business—why, maybe there was some connection there, I don't know.

But I did legal work for Gates in the last fifteen years of his life. Knew him very, very well, and he knew how to add and subtract—something that some great financiers today have forgotten about. He knew how to run a business, and I would guess that his contribution, aside from money, was that Caltech conducted its affairs, its business affairs on a businesslike basis. He and his brother Peter [Goddard] Gates gave the Gates Laboratory of Chemistry [1917], which is now being remodeled.

POWELL: So, these men gave more than money. They gave time and gave of their knowledge?

HAHN: Very definitely, because, after all, when you consider that the president of Throop at that time was a holy man, and they are not noted for money matters, these men had to have given a lot of time to the management, the actual business management of Throop.

POWELL: James A. B. Scherer was the president at that time?

HAHN: Scherer was the president at that time [1908-1920], and he had been a minister before getting into the education business. Maybe he was in the education business before he came to Throop.

POWELL: Well, he was a minister or a preacher of some kind before he came here?

HAHN: That's my understanding of it, yes.

POWELL: You had some recollection of him and General Pershing?

HAHN: Yes, in 1919, General [John J.] Pershing made a tour of the country to pay tribute to the men who had been in the service under him. The way these events always went was that the town would have a parade and General Pershing and his staff would ride in the parade, as would various citizens. I had the luck of being commander of our local post of the American Legion, which was very active in those days. So, two or three of us went in an open touring car to get General Pershing from his private railroad car, which was parked over in Los Angeles, and Scherer and I were two of the ones in the car with Pershing—possibly one other. But Scherer, on the way as we went along, got to talking about his intimate friendship with Theodore Roosevelt. Of course, it was Theodore Roosevelt who had advanced Pershing so fast in the Army, and Roosevelt was devoted to Pershing. Scherer chattered along about this great friendship that he had with Roosevelt, and he was talking to a man who was probably closer to Roosevelt than anybody else. The General just sat there and never said a word and grunted once in a while to show he was paying attention. That was about all that came of that conversation.

POWELL: And you didn't say a word?

HAHN: No, I was a second lieutenant at that time, and as I look at the picture of us in the automobile, the general, who ranked me slightly, was on the right, appropriately, and I was on the far left, which meant the bottom of the rank.

POWELL: One of the early other faculty members was [electrical engineer] Royal W. Sorensen. You knew him personally?

HAHN: Oh yes, Sorensen and his wife Grace were devoted friends of my Uncle Ed—Edwin Hahn—and Aunt Martha, and I knew Royal Sorensen from Throop days for the rest of his life. He was the most charming, charming man, and a great engineer. As others will say about Sorensen, he developed high-voltage transmission here in Southern California; the Southern California Edison Company put up money for his laboratory. The thing I remember that startled me once about Sorensen was that in the Monday night lecture series he would give a demonstration about electricity, and at that time he had a generator there that would generate enough voltage to make lightning, and so he had a

spectacular demonstration of man-made lightning. He put an automobile on the floor of the laboratory, then he got in the automobile and his assistants generated the lightning, a bolt of lightning struck the automobile, and then Sorensen got out of the car. Well, I wouldn't have sat in the car.

POWELL: Did this take place on the present Caltech campus?

HAHN: Oh, yes.

POWELL: And he was a member of the faculty there and came over from Throop?

HAHN: Yes. He was one of the few who did that.

POWELL: Did he go to Pasadena High School?

HAHN: No. Sorensen did not originate here. I don't know where he originated from. [Sorensen was born in Wabaunsee, Kansas—ed.].

POWELL: Throop moved to the present campus in 1910?

HAHN: Yes.

POWELL: Will you speak a little about that?

HAHN: I was interested particularly in that, because—perhaps where the Eudora Hull Spalding [Laboratory of Engineering] building, the observatory building, and machine shop are—my uncle, Edwin Hahn, owned an orange grove through there. The area between Wilson Avenue and Hill Avenue north of California Street was owned by several people in areas of maybe five acres and ten acres, that sort of thing. I was interested in reading, back in the minutes of the Board of Trustees, of the period early after Throop moved down to California Street, that the board considered seriously whether they would or would not buy \$200 worth of manure to spread on the Hahn

orange grove, and they decided that it was important enough to do it. Of course, all of those trees are long gone.

POWELL: Another name connected with the Throop Polytechnic Institute, of course, is Virginia Pease Hunt and her husband, Myron Hunt?

HAHN: Yes, Virginia Pease Hunt was one of the greatest women Pasadena has ever had. She was a doer and extremely intelligent. She thought as a businessperson would. After Myron Hunt's first wife died, she and Myron married. Myron and Virginia did not have any children, and, of course, Myron was one of Southern California's foremost architects. They were both community leaders; it just seemed that everything that was good that went on in Pasadena just had to have Myron Hunt and Virginia Hunt involved in it. She was [the founder of] Polytechnic Elementary School, and they were hard-working Caltech Associates. In fact, the first time I ever had dinner at the Athenaeum was at their invitation. Lorna and I went down there and had dinner, and they were thinking they could interest me in joining the Associates. Unfortunately, they had vastly overestimated my wealth, and I had no such money to do anything like that then.

POWELL: Was it necessary to subscribe a certain amount of money in order to join?

HAHN: Yes, you subscribed \$1,000 a year for ten years, which would make a total of \$10,000. On the other hand, you could pay the entire sum in one lump, and you could do that for between \$8,000 and \$9,000. That was a lot of money in the 1930s, I want to assure you.

POWELL: Sometime later you did join?

HAHN: Yes. That was a tragedy and a laugh all in one. A tragedy in respect to somebody else and a laugh as far as I was concerned. Rob Millikan called me up in the middle or late thirties and wanted me to join the Associates, and I assured him that I had a family to support and my only fount of money was from my monthly return from my law practice, and I had no money that I could do anything like that with. Billy [Professor William

Bennett] Munro called me and urged me to do this, and I again repeated it to him. Then later a friend of mine, Colonel John Hudson Poole, who was then treasurer of the Caltech Board of Trustees, called me and said that he understood that I didn't have enough money to join the Associates but that they wanted me, and if he would put up the money, would I accept the membership. I said, "Sure."

So, I was elected, and some time went on—I've forgotten whether it was a year or two or three years—but we had a tragedy, in that Poole committed suicide [1940]. Then when I looked into the matter of my membership in the Associates, I found that he had not paid the full \$10,000—or the commuted amount of \$8,000 or \$9,000—but he was electing to pay it on the annual basis of \$1,000 a year and had only paid \$3,000. That was quite a serious matter for me, because I just didn't have the money that I could use for other than the family. But the directors of the Associates fixed that and elected me treasurer, because Donald O'Melveny died [1942], and that must have been about the time that we lost Colonel Poole. Some way or other, I never got around to collecting that remaining \$7,000 from myself until 1955, when I was elected to the [Caltech] Board of Trustees. At that time, I had more money, and also my position as a debtor to the Associates was intolerable, and I paid the other \$7,000.

POWELL: But up until that time, your contacts with Caltech and your interest in it were due to your acquaintance with these various men and the legal work you might have done for them?

HAHN: Yes, that's exactly it. I did legal work for C. W. Gates. Henry M. Robinson was, strangely, a supporter of mine and recommended clients to come to me, and I saw considerable of him. Billy Munro came to me to have some legal work done, back in the early 1920s, and my contact with him was constant from that time on.

POWELL: Did you represent his wife in some legal matters?

HAHN: Yes. That was an occasion in about 1923, let's say, when she had some matter of inheritance from an estate of one of her parents, and Billy was giving half-time to Harvard and half-time to Caltech then, and he was going away and couldn't attend to it.

He surprised me at that time, because in one of my early conversations with him about this estate matter, I spoke about some long principle of law or something of that kind, not knowing that Billy was a [professor of government at Harvard] and Billy right away corrected me when I was in error. He was a great, great man, and a great friend and a great personality.

POWELL: He was active for many years in Caltech affairs and civic affairs outside?

HAHN: Oh yes, indeed. He not only set up the present form of the Humanities Division, but he became a trustee of the Institute and was a director of what's now the Security Pacific Bank.

POWELL: You knew him socially?

HAHN: Oh, yes. We were members of the Twilight Club together. We had a period when we had our meetings at the Pasadena University Club, and they did not have any liquor license there, and Billy liked to have his nip before dinner and, as he called it, a pre-prandial hour. Incidentally, I had to use the dictionary to find out what "prandial" meant. So he and Scott Brown and Archibald Young and various other persons who were interested in Caltech would gather in the library and each one of us would successively be the host and provide the booze for the evening, and so we would then get suitably conditioned for the Twilight Club dinner and the lecture after it.

Then Billy had that same event in his own home over on California Street near Orange Grove Avenue. It was really something to remember, to go down to Billy's at five o'clock, and Caroline would set up the portable table in the living room and bring on the booze. It was not in the original bottles it was purchased in but in the most beautiful cut-glass bottles, with well-polished silver chains around them and silver labels indicating what it was. She would then sit down before the table and prepare the drinks and serve them, bring them to Billy and me, just as any good wife should do. Then she would leave, and Billy and I would get prepared to settle the world's affairs, which we would then do for perhaps an hour, and I would leave. That was something one would never forget.

POWELL: Did you really talk about world affairs? Or more local problems?

HAHN: Oh, you know what an hour of good bourbon will do. It was everything.

POWELL: You don't recall anything specific?

HAHN: No. Billy's interests were simply worldwide. There was just nothing that failed to interest Billy. True, his primary professional capability was in the subject of government—political science, some call it. And a sub-item would be history. Those were the things he taught and wrote books on. He made a great deal of money out of his textbooks on government.

POWELL: He undoubtedly enjoyed your company, as did many of these men. Were you a good listener?

HAHN: I have no idea why. That always has puzzled me, because Billy, some way or other, ever since the early twenties and until he died [1957], always wanted me along with him in local things he was doing, like getting me to go on the board of the Pasadena Hospital, now the Huntington Hospital. He called me—he was then chairman of the Huntington Hospital Trust that had money in there—and wanted me to go on the board, and I said, “Billy, I don't have the energy to do it”—this was in 1949, I think—“and I don't have the time, and you get somebody else.” But no, Billy said I had to come; wouldn't I come on the management committee and they would take one hour of my time each month and no more for a year and see whether I liked it or not. That was Billy's subtle way of making me interested in the Huntington, and my association there was of such great interest that I continued from then on for the rest of my life until now. And although I do not attend meetings anymore, I keep very careful track of what's going on down there. But that's the way Billy did things; he'd get you finally some way or other.

POWELL: Do you suppose he used this in the classroom, too—to inspire his students?

HAHN: I think he must. He was a most impressive man and a learned man.

POWELL: Was he physically impressive?

HAHN: Yes, he was. Billy was stocky, perhaps five-foot-seven or -eight, and always dressed immaculately, always clean-shaven, hair carefully brushed. He was a man you noticed, and he stood very straight, erect. And some way or other, Billy was the picture of a personage of note, and that's just what he was.

POWELL: Not exactly professorial looking?

HAHN: Well, at the highest level, yes, but not like [Thomas Hunt] Morgan and some of the other fellows down there who didn't care how in the world they looked.

POWELL: Not the absent-minded professor?

HAHN: Exactly that—Morgan was typical of that.

HERBERT L. HAHN**SESSION 2****January 13, 1981****Begin Tape 1, Side 2**

POWELL: Would you like to talk about Arthur Fleming and his relationship to Millikan?

HAHN: Well, I don't remember specifically about Fleming's relation to Millikan, but it's my understanding that he gave his Sugar Pine Lumber Company stock to Caltech, perhaps around 1920. I remember that one of those trustees, of whom I believe there were three, was Alan Morphy, whose son Mike [Michael A.] Morphy I think now is chairman of California Portland Cement. And Alan Morphy stayed with that until he got it through its financial difficulties, which came about after the trust was created, and finally delivered the assets to the Institute at a much later date and did a great job, a tremendous labor, for the Institute. Alan Morphy—few people would know about him. What I remember about him was that after he labored for something over thirty years with it, he never got a resolution or a note of thanks from the Caltech Board of Trustees, and he was thinking maybe that they at least should have said "Thank you" for the job done. [Laughter]

POWELL: You mean he was administering this?

HAHN: He was one of the three trustees of the Fleming Trust that held the stock of the Sugar Pine Lumber Company, which was, back in the twenties, the main capital source of the Institute.

POWELL: There were some restrictions on that gift?

HAHN: Yes. A very interesting one. That was that if the Institute became indebted other than for the usual routine bills and that kind of thing, the trust should terminate, and the

assets should be taken away from Caltech and go to his heirs. That provision still stands, and Caltech is not indebted to anyone excepting for its routine bills.

The main thing I remember about Arthur was that in the early twenties he and I were on the Board of Directors of the Pasadena Chamber of Commerce and Civic Association—the first board after it was created; that is, the current organization. The thing that astonished me about Fleming was that many times when he voted no, he would be the only one voting no. He would then ask that the minutes record his “no” vote. That was the first time I’d ever come across anybody who did that sort of thing, and I think is the only time since. That was one of his characteristics. And, also, it occurred to me that he had very little sense of humor. He was a very businesslike fellow; he was quite unusual in those two respects. I don’t mean to say that he was against everything—not at all—but nevertheless, every once in a while, he would be the only one voting no and he wanted his position recorded for posterity.

POWELL: Do you recall that he had valid reasons for his vote?

HAHN: I don’t recall anything about the reasons. As a matter of fact, the problems were trivial, when you get right down to it.

POWELL: But he was on the Board of Trustees when Millikan came to Caltech. Did you know Millikan personally, and could you talk a little about him?

HAHN: Well, I first knew Rob—as [the mathematical physicist] Max Mason used to call him, and I thought that was a good way to speak of him—shortly after he came here, after World War I, but I’ve forgotten the details. I remember at the time we dedicated the American Legion Building in the middle twenties, Rob came, and I think Billy Munro was also there. I do not recall specific events about Millikan in the twenties except that one event.

I remember one time—and I don’t know when this date was—when Caltech wanted to purchase Tournament Park for its physical education program. I’ll digress to mention that physical education program, because one day Rob phoned me and asked me if I could come down to the Institute; this was during World War II, at which time we had

a military contingent of students there, one of those V-as-in-vinegar programs. We sat up in Rob's office and looked down the Olive Walk, and he said, "You know, the physical capability of these students in comparison with the Navy officer candidates rather appalls me." Rob told me, I think, that he was very much interested in gymnastics when he was a student at college—it was Oberlin College, if I remember correctly, in Ohio. Rob looked the part of a gymnast; he was a very vigorous, athletic-looking, smaller man. He said, "I'm considerably alarmed about this. We just don't have the facilities for physical recreation that we ought to have, and I wonder if you could get Mr. and Mrs. [Keith] Spalding interested in it." Because Spalding's father was A. G. Spalding, the sporting-goods man and a former professional baseball player, Rob thought that Keith would perhaps naturally be interested in it. I don't know what I said to him, but at any rate Keith did not do it.

Then Rob again called me and wanted me to intercede with my uncle, Edwin F. Hahn—who had been a judge of the Superior Court and, of course, originally a member of our law firm—and get him to chair a committee to promote a citywide election, which was necessary to acquire Tournament Park. This was done, and my uncle was chairman of the committee. The election was successful, and then Caltech had what was the old Tournament Park. After that, Scott Brown, who was a retired Chicago lawyer, formerly general counsel for the Studebaker Corporation and a devoted University of Chicago alumnus and first baseman on their baseball team, who had come to Pasadena with his wife—they had no descendants—gave the money for the big physical-education facility on Tournament Park grounds. I go into all this because this was a basic thinking of Rob Millikan—that the physical well-being and physical condition of the students was an extremely important thing to the Institute, and these are some of the lengths to which he went in that respect.

POWELL: Did that mean he had to hire someone who would conduct the recreational program or athletic program for the Institute?

HAHN: They always had something of that kind; that always was true. But it meant having the space and the facilities for this sort of thing, which we did not have, and when

one looked at those Navy students who were there, many of whom were on the athletic teams of the Pacific Coast, the comparison of physical strength was really quite shocking.

POWELL: Speaking further about Millikan: He was a scientist, of course, but was he also a religious man?

HAHN: Yes, yes. Rob was a very devout religious man. He attended the Neighborhood Church, at the northwest corner of Pasadena Avenue and California Street, which was formerly the First Congregational Church, where I was baptized as an uncomplaining—or maybe I did complain—participant. One day I was chatting with him, and I brought up the subject of any possible conflict between the Bible and scientific proof with respect to the origin of the universe. And I asked him how he could reconcile the Bible's lack of positive proof of what it says, and what he thought about the origins of the universe and some physical things. He said, "Well, concerning those things, there is no other answer than the religious answer." This was quite interesting, because I think he had had some conflict with Karl Compton, at MIT, concerning this difference of belief—that is, the question of taking the Bible's statement without scientific proof or, as Millikan did, accepting the Bible statement when he couldn't prove otherwise.

POWELL: Do you think he continued to accept that belief?

HAHN: I have no idea.

POWELL: You didn't discuss it any further?

HAHN: No, I don't remember discussing it with him again. But he was a leader of that group over there. In fact, he employed a teacher of religion at the University of Chicago to come to Caltech and also accept the pastorship of the Neighborhood Church. Theodore Soares. He was a very great man.

POWELL: He came to the Neighborhood Church through Millikan?

HAHN: Oh, I'm sure of that. Although I can't say that somebody told me.

POWELL: Apparently, when Millikan came here, he never wanted to be the president of the Institute. He maintained the chairmanship of the [Institute's] Executive Council.

HAHN: That's correct.

POWELL: Were there some administrative problems that developed as time went on which Millikan was aware of and which brought about some changes in the way the administration was handled?

HAHN: Well, there certainly were, but I'm not sure, though, that they became too apparent during Millikan's lifetime. It was at the time that Lee DuBridge resigned [as Caltech's president] and Harold Brown came aboard to replace him [1969] that this finally was changed. Well, the reason for it was that at the time, I became active there, the business of the Institute, in anything but nominal financial sums, had to be voted and determined by the Board of Trustees—for example, the \$200 worth of manure for the Hahn orange grove—which was typical of the financial set-up of Caltech and of all other educational institutions at that time. As the Institute grew larger, and finally as JPL [the Jet Propulsion Laboratory] came on and all these contracts had to be voted [on] and signed by a member of the trustees, an officer of the trustees, Jack [John] O'Melveny, finally complained that he was having to take altogether too much of his time to sign these contracts.

So Arnold Beckman, who was chairman of the Board of Trustees [1964-1974], caused a national firm of organizational experts to be employed to survey the situation at Caltech, in comparison with all other educational institutions of the country with which this firm was familiar, and give us advice as to whether we should make a change and what the new set-up should be. And this was done.

Prior to that, and in the interim, I was elected vice chairman of the Board of Trustees, as was Shannon Crandall also, so that we'd have three to share the troublesome task of signing these contracts. You can realize that none of us knew anything about the contracts or what was done about it; we were taking some officer's word for it entirely. I

signed a great many of those contracts over a period when the space program was at its height. Then, as a result of this firm's work and recommendations at the time that Brown came aboard, we changed to a corporate form of organization, wherein the president was the head of the business of the corporation and the president or the vice president could sign these contracts and they could make their determination—although there still is some restriction, in that contracts involving above some certain six-figure amount must be approved by the Board of Trustees but need not be signed by a trustee or an officer of the board. So we made a big change.

It got to be a severe problem when JPL came along, because Beckman was still in active command of his own business, and Lee DuBridge was having all kinds of things to do. And when decisions were made that he and his subordinates thought should be done, they couldn't wait if Arnold was out of town, or things of that kind where the chairman was needed—the chairman himself. So David Morrisroe, who is now our financial vice president, was one of the group of this advising company that recommended to us the new form of organization, and now the board chairman is relieved of a lot of duties that were on him as well as [on] the vice chairman.

POWELL: When you were signing these contracts, was that in your office?

HAHN: Yes, JPL would come to my office, and I was the one who was handy. I was right close, and so I would get a telephone call from them and they would come down and I would sign a contract for \$100 million or something of that sort. It kind of bothered me, because, as I complained to [trustee] Norman Chandler one day, "I can't be responsible for \$100 million. I don't have that kind of capital. And here I am signing contracts that I don't know anything about at all, excepting they've got some initials on them of men whose duty it is to certify that they are proper, and I should sign them."

POWELL: Do you remember his comment—Norman Chandler's?

HAHN: Oh, yes. He said, "Oh well, that's the way business has to be done." Didn't bother him any, and I guess it shouldn't have bothered me. I never got in any trouble over it.

POWELL: You were going to talk a little about [Keith] Spalding, and you mentioned earlier that he wasn't interested in helping with Tournament Park. Now, how did he or Mrs. Spalding finally contribute so much to Caltech?

HAHN: Well, you can give Franklin Delano Roosevelt the credit for this gift, because in the late thirties the United States Revenue Act was changed so that the federal estate tax was enormously increased, and Mrs. Spalding—that's Eudora Spalding, for whom a building is named on the campus—was the one who had the money and the assets. Her assets consisted of Rancho Sespe—which was valued at something over \$3 million [at her death in 1942]—and also a share of the iron mine at the big Hibbing pit in Minnesota, and it is this iron mine that really produced all the money for the Spalding family. Under this new revenue act that raised the federal estate tax so much, she did not have enough outside money to pay the death taxes if she was going to give the mine and the ranch to individual people. They had no descendants, and so it would have meant giving it to Keith and friends.

Keith and I talked about it when I mentioned to him that this devastating thing had occurred and that something had to be done about it. We discussed various ways we could change Mrs. Spalding's will so that the money she had would cover the situation when she died. He asked me to write a letter outlining my thoughts on it so he could present that to Mrs. Spalding, and I then wrote a several-page letter, of which I still have a portion. And I mentioned that a trust could be provided in Mrs. Spalding's will wherein Keith would be the trustee and Caltech would receive all of the income and ultimately the capital, and by that means Keith could live up there at Rancho Sespe as much or as little as he wished, and really that's all they did wish. They never took any money out of the ranch and they just used it as a plaything. In addition to that, if he lost all his other assets and needed money, why he could take a salary as trustee—which he never did—and the same with the iron mines. I remember I used Caltech as the charitable example that could be used here to exempt the mines and the ranch from death taxation.

The Spaldings were friends of Millikan and they liked him very much; they were very much impressed with him. Well, I knew that when I wrote the letter, and so it resulted in writing the will which was in existence when she died, which generally gave

the iron mines one half to Caltech and one half to the American Museum of Natural History, in New York. That was because she caught a world's-record fish and they exhibited the fish back there. [Laughter] Sure. As to Rancho Sespe, Keith was a trustee of it for life and Caltech was to have as much of the income as he thought wise to distribute. If he thought some should be set aside for safety, he could do that, and after his death, which occurred in 1961, I was to be the trustee, which I was from 1961 until 1969. We distributed the income to Caltech and then in 1969 when I determined the trust should stop, they received all the capital, and the trust terminated.

POWELL: Was it your decision as to when the trust should terminate, and the capital be turned over to Caltech?

HAHN: As it turned out, yes. Again, because of the decisions of our bureaucrats in Washington, in which they increased the taxes on the trust such that it made it wise to give it to Caltech, where it would pay less taxes. That's why we did it.

POWELL: By this time there was some oil money involved?

HAHN: Oh yes, we had some luck up there. Of course, Eudora Spalding, when some oil company wanted to do geophysical work on the ranch, back in perhaps the thirties, said she didn't want any stinking oil wells on the ranch and wouldn't let them on. But in about 1950, Keith didn't care so much about oil wells that stunk, and so after some competition, which was very interesting, we made a lease with Standard Oil of California.

POWELL: Other oil companies wanted to bid?

HAHN: Oh, yes, we had competition from other oil companies, and in that way, we obtained a very, very excellent lease, which was for a wildcat. Quite unusual, because they paid us a bonus of \$150,000 to sign the lease, and in addition to that we were to have one-fourth royalty. On a wildcat. I may say that on a wildcat, usually the going rate of royalty in those days was one-eighth, not one-fourth.

POWELL: They didn't know for sure if they were going to get much oil?

HAHN: They didn't know at all. They did have geophysical work that indicated that oil might be there, but that was all. And then there was a discovery, and by the time the oil gave out, sometime in the 1960s, Caltech got about \$3 million out of the oil. So that, come 1969, the trust had terminated and so did the oil; and Caltech came into the ownership of it and, a few years later, sold it to some fellow in Pittsburgh, who in turn has sold it, and again it's been sold.

POWELL: You were certainly instrumental, even on a low-key basis, in getting that money for Caltech.

HAHN: Well, you certainly might say in a negative way; I didn't oppose it, and that's about the most you can say for it. Many times, Keith and I would discuss over the years the comparative worth of Caltech as a place to give money [to]. Keith was a Yale graduate, just after the turn of the century [1902]. On the other hand, he got attached to Caltech, and Yale had very little contribution from him.

POWELL: Was he a member of the Board of Trustees before all of this happened?

HAHN: No. I don't remember just when he went on the Board of Trustees; it was before I did. [Keith Spalding became a Caltech trustee in 1943—ed.] I am going to assume that the reason they put me on the board was because of my connection with Rancho Sespe and with Caltech. And Rancho Sespe was a big factor in the income of the Institute.

POWELL: I would think so.

HAHN: Yes. I think out of the Spaldings, both from Keith and from Eudora Spalding, Caltech can't have had less than \$10 million. Back in the times we're thinking of, \$10 million was a tremendous financial factor in Caltech's welfare.

POWELL: Can you recall the time you arranged for the board members to visit the ranch?

HAHN: Oh yes, we had a fine day up there. We had a workmen's—single men's—dormitory there, and a place to feed them, and one day we had them sweep the place out and we had all the board who could come up there. We put them in automobiles and took them for a tour of the ranch and a lecture as we went along, a lecturer in each car. And had a very fine time.

I remember another day, Jim [James G.] Boswell came up with me. Perhaps Jim Boswell's concern, the J. G. Boswell farming company, is the largest in the United States right now. Unfortunately, Jim resigned from the board, because he had too much else to do. He went up and spent the day with me and gave me his approval on what I was doing up there. This was after Keith died and while I was trustee.

My interest in the ranch started back in the twenties, when I first became Keith's lawyer. He and Eudora had moved to Pasadena, to a bungalow at the Maryland Hotel, at Colorado and Los Robles, and he rented a room in the old Boston Building, at the southwest corner of Raymond and Union Street. It was my good luck that it was next to our office, and it was my acquaintanceship with Keith—because he had a room next door to our office—that finally, in the late twenties, resulted in his changing his lawyers and employing me. From there on I was quite intimate in the conduct of the ranch.

POWELL: Was Mrs. Spalding willing to go along with giving the money to Caltech?

HAHN: Oh yes. Yes, Eudora liked Robert Millikan very much. And perhaps, of course the fact that Rob Millikan came from the University of Chicago and Mrs. Spalding was a Chicagoan, as also was Keith, at that time. So that it all fitted in extremely well, very naturally; and she always was proud of what she did for Caltech.

POWELL: Did Millikan involve himself in the raising of funds at all?

HAHN: Yes, and he did in the most insidious way. You didn't know you had it done to you. [Laughter] Oh yes, Rob was a master. He was a master in lecturing on what was important, what was great, what was good, and without saying so, why, he was offering you the privilege of going along with it.

HERBERT L. HAHN**SESSION 3****January 15, 1981****Begin Tape 2, Side 1**

POWELL: Would you like to start this morning by talking about Scott Brown and his contribution to Caltech?

HAHN: Yes. Scott Brown was a very important man to Caltech. He belonged to the Associates, and as I recall, was on their Board of Directors. After his death, with funds that he left to Caltech, the Scott Brown Gymnasium was constructed [1954]. This was a thing that Robert Millikan would have loved to see.

The two things that I was mainly with Scott Brown on were Caltech and the Carmelita [Garden] property, which he was determined to save for the public benefit of Pasadena. At the time that he was stirred up about Carmelita, there was a proposal to have sub-dividers take it and put business or residential buildings on it. In connection with Caltech, Scott eventually took up Robert Millikan's idea that better facilities should be available for the students and that it was very important to have the students have as good health as the Institute could force them to have. Among the things that he generated at Carmelita—which has a bearing on Caltech, which I'll later recite—he felt that we would have to have some kind of an organization to acquire the land and an organization that would be free of real-property taxes. Between Scott and Dr. Millikan and Dr. Munro, particularly, it was thought that we did not have a first-class school of industrial design around Pasadena. Maybe there was no such school of first-class quality in Los Angeles that limited itself to industrial design. So, there was founded the California Graduate School of Design [1937]. Scott was a member of the Board of Directors and as I recall it he prevailed on Archibald Young, whom I'll later refer to, to be president of the Board of Directors. Albert Ruddock, anonymously as usual, was the chief financial supporter. But when World War II came on, in late 1941, it was found that with no endowment funds or other support the school could not continue, and it was abandoned.

Some of the curriculum was taken over by Caltech, in an experiment to see whether it would be something that followed naturally to the other educational efforts of the Institute. But it did not work out that way, and Caltech's effort to perpetuate the work of the School of Design stopped. The archives at Caltech have the minute book of the directors' meetings of the School of Design, and various other material, which I delivered to them. Scott was always talking about Caltech, it seemed—although he was never elected to the Board of Trustees.

POWELL: In speaking of Scott Brown and the Design School going over to Caltech or some of the courses—did any of the property then go to Caltech?

HAHN: I don't recall—the property itself, that is the land. I've forgotten just what the arrangement on the land was, because some way or other it went to the Pasadena Art Institute or was retained by them, as well as the Pasadena Grandstand Association, which was another organization that Scott Brown had generated to raise money for the conduct of the School of Design. This organization used the Colorado Street frontage on which to erect grandstands on New Year's Day, and in that way made quite a little money for the School of Design. The present buildings there were constructed with money raised by those interested and is now the Norton Simon Museum. I'm sure Scott would be so pleased, if he were only alive now, to see that splendid thing that exists over there, which I believe would not have been, simply would not have occurred, had it not been for Scott Brown.

POWELL: Well, in the gymnasium for Caltech, was that his wish—that a gymnasium be erected with the money he gave?

HAHN: Yes, he was always interested in athletics. He was on athletic teams in his student days at the University of Chicago. He was always interested in those things, and he knew of Rob Millikan's interest in them as well. Yes, that was something of Scott's wish. It may have even been in the trust where the money came from. I've forgotten about that.

POWELL: The infirmary, or what they call the Health Center—that was money from Archibald Young's estate?

HAHN: Well, not exactly. Archibald Young, again, was a retired Chicago lawyer, and his wife's family had money—a surplus of money. They lived in a beautiful house over on San Rafael Avenue [808 South San Rafael], and Arch—as I would call him—was an officer and member, of course, of the Caltech Associates. After he died [1955], Mrs. Young wanted to do something that would leave Arch's name somewhere around Caltech, in honor of his long interest and effort in behalf of the Institute. She talked to me about it, and the amount she had in mind was \$5,000. And at that time, which date I just now forget, we very much needed some health facilities there. We had no infirmary. We had no beds to take care of the students who were not sick enough to require going to an acute hospital but nevertheless had to be taken care of somewhere beyond the facility of their own room or bed.

A Caltech trustee, Dr. Lawrence Williams, was Mrs. Young's physician, as well as Albert Ruddock's and Lee DuBridge's, and Shannon Crandall, a Caltech trustee who lived across the street on Arden Road from where the Archibald Young Health Center now is, was Mrs. Young's devoted friend, and I was her lawyer. Some way or other, we all overlooked the question of conflict of interest and tried to figure out how we could raise her \$5,000 to \$200,000, which was the amount needed for this health center on which Arch's name could be placed. Well, it was finally worked out that she could put a provision in her will that would recognize a liability for the difference between the \$5,000 and the \$200,000, and if, in her lifetime, she had not made the gifts to complete the \$200,000, then the deficit would be given from her will and estate. This was an advantage to her, because she did make these annual contributions up to the limit of their income-tax deduction, so that she got a complete deduction for all of the gifts. And as I recall it, she had completed the gift by the time she finally died. But in the meantime, it took money to erect the building, and some anonymous donors—and I'll bet it was the Ruddocks—donated a large part of it. But it was ultimately all paid for by Mrs. Young.

POWELL: Where did her money come from?

HAHN: Well, her father had some interests around Chicago, either manufacturing or real estate, possibly natural resources of some kind; I forget just what his business was. But it was enough to make her significantly wealthy. She inherited it from her father.

POWELL: Young himself didn't—

HAHN: No, Arch was not a wealthy man at all.

POWELL: Did you know him pretty well?

HAHN: Oh, I knew Arch Young intimately. He was one of my very, very good friends.

POWELL: What business was he in?

HAHN: He was a lawyer in Chicago.

POWELL: Then he came out here to retire?

HAHN: That's it, they came here to retire, I judge in the early twenties.

POWELL: That's interesting, in view of how many people came out here in those days to retire. People with money, all of whom contributed to Pasadena and to the Institute.

HAHN: Yes. In looking over the list of the trustees that was prepared by Ted [Theodore C.] Combs [secretary of the Board of Trustees, 1968-1973], you see, right from the very start, Amos Throop was that kind of person. Another original trustee, James Scoville, was another, and you can go on down the line of people of that type who came to Pasadena.

POWELL: These men had time and money to devote.

HAHN: Yes, it's a combination of those two things that makes them so important to Caltech.

POWELL: Now, [Albert] Ruddock is another man who made considerable contribution. Would you like to talk about him?

HAHN: Well, I certainly would, and I had the great privilege of being one of four to speak about Albert at the Caltech memorial service that was held after Albert's death [1970]. One of the things I mentioned there was Albert's effort to beg money for Caltech, which was continuous from the time he first took an interest in it. I mentioned there the gift by an unnamed person of the stock that was used to construct the Millikan Library, and this was Seeley Mudd, and Albert related to me how this came about.

At the time that Seeley's contribution was made for that particular purpose, Albert was looking around for somebody who would give the \$2.5 million that was necessary for it. And it occurred to him that maybe Seeley knew the name of some person that Albert could approach for this purpose. We had many other buildings that had been given, with the names of the donors usually given to them, but no one had ever put up the money for the library. Albert told me that he telephoned Seeley and asked him for permission to come and call on him, and when he got there he announced the purpose of his visit—that maybe Seeley would know of the name of somebody who might give a sum of that magnitude for this purpose. And Seeley responded, “Well, Albert, you haven't asked me.” The result of it all was that Seeley gave stock of the Cyprus Mines Corporation, of a value of at least \$2.5 million.

An interesting side effect of it all was that under the internal revenue laws of the United States, the Institute was required to retain this stock and not sell it for a period, I think probably of one year at least. Otherwise, the Institute, of course, as soon as they had received the gift would have converted it to the money necessary to construct the building. But the Institute being prevented from that, the stock doubled in value during the time Caltech was required to hold it, and so we have other buildings on the campus that resulted from that increase in value. It's my recollection that we finally got maybe \$5 million out of the stock. That was an interesting side issue on how Albert approached people. He told me it hadn't occurred to him that Seeley would be the one who would want to do it.

POWELL: Yet Ruddock himself gave much money?

HAHN: Oh yes, indeed. He and Maggie, his wife, gave the limit of what you could expect anybody to give. They had children, descendants; they had a family to give to as well. So frequently it's people like Scott Brown and the Spaldings who give large sums of money but have no descendants, and so it comes to a time when they realize they can't take it with them and they look about for something to do that pleases them, instead of having it go for taxes.

POWELL: Ruddock was at the Huntington Hospital?

HAHN: Oh, yes. Albert Ruddock was chairman of the [management committee] there for many, many years in the twenties and thirties, and devoted a great effort to that. Those were very hard days, because the hospital borrowed some money in 1921—I think \$200,000 on a bond issue to construct the south building—and come 1933 or 1934, it lacked patients so much that there was a time when one month it didn't have the money to pay its payroll. And this was the period that Albert labored so hard down there. And as a result of Albert—and Billy Munro and others I can't think of right now—the deal was made with the Huntington Hospital trustees under Mr. Huntington's will to take over the Pasadena Hospital and name it the Huntington Hospital, and provide the \$2 million that Mr. Huntington left for the hospital purposes. Albert was all involved intimately in that sort of thing.

POWELL: Do you know how he got involved in Caltech?

HAHN: No, I have no recollection. I didn't know Albert at that time. The time I first met him surely must have been in the late twenties.

POWELL: Doesn't it seem as though a great many of these men involved themselves in various civic functions and purposes in Pasadena, like being involved in the hospital and Caltech, and you mentioned, I believe it was Billy Munro, who was involved in the city government?

HAHN: Whatever in Pasadena was important and good, Albert was in it.

POWELL: And at this time, Caltech's board was made up more of local men?

HAHN: Yes, yes. Again, I think that at the memorial service for Albert some other speaker referred to the period when Albert was chairman of the Caltech board [1954-1961] and he suggested that we have national trustees, those who lived a distance away from Pasadena, rather than a local board as it then had. And, again, this change in determination, which results in a board that is so significant and national in scope—that, again, was Albert's idea. Surely, Lee DuBridge and others involved participated in the idea, but Albert was the dominant part of it, and somebody gave him credit for that—for having the original idea.

POWELL: I see. Well, speaking of these men who were involved in the city, I believe Franklin Thomas was on the city's Board of Directors, and wasn't he also an important person at Caltech?

HAHN: Oh yes, indeed. Franklin Thomas was professor of civil engineering at Caltech and also took a great interest in religious and civic affairs. When I first became acquainted with him, which would be the early twenties, he was very much interested in and a member of the Lake Avenue Congregational Church and persuaded me to do some legal work for the church up there that was needed, which I was very happy to do. From then on, I had a close friendship with Franklin, until he died.

All during his term of leadership in the engineering field at Caltech, he did civic things that were of great importance. He was on the city's Board of Directors and when the Metropolitan Water District was formed [1928], why, he was one of the originators of the idea—one of the campaigners to sell the bonds that were ultimately sold and the Hoover Dam constructed and the electricity provided for Southern California from the Colorado River. Excepting for the chief engineer in Los Angeles who promoted the whole affair, there was nobody more important in that whole business—in promoting it and seeing it done—than Franklin Thomas, and alongside of him locally was Hiram Wadsworth, one of Caltech's trustees. He helped to persuade people to vote these bonds.

POWELL: He was mayor at one time?

HAHN: Yes, Wadsworth was mayor [1921-1925] and, again, a leader on the Caltech Board of Trustees.

POWELL: So, all these men were giving their time to Caltech and some of the Caltech faculty were giving of their time and effort for the city?

HAHN: Yes, yes. We've had a lot of the Caltech faculty who have devoted themselves to that most important thing in the city political life, the city Board of Directors. I remember Bob [Robert L.] Daugherty, who was professor of [mechanical and] hydraulic engineering at Caltech and who designed the pumps for the whole Colorado River metropolitan water system, was also mayor of Pasadena along in the thirties, I believe [1929-1931], and Bob [Robert W.] Oliver [professor of economics] of late years was on the Board of Directors. It was recognized by those who dominated Caltech that it was very important that the institute personnel devote some of their talents to civic efforts here. Fortunately, some of them devoted it to political effort, local political effort. It's harder to get them to do that than it is to get them to join some charitable effort.

POWELL: They were aware of the importance of having a good city in a good location for the Institute.

HAHN: So very, very important. And I'm sure that this was one of Arnold Beckman's realizations in giving the money for and causing the design of the Beckman Auditorium—that we really had no fine meeting place, something that was beyond just routine, as Beckman Auditorium is—where public gatherings in furtherance of educational and civic betterment, all that sort of thing, could occur. The Caltech group was very much aware of that.

POWELL: You don't off-hand think about Caltech as being involved with these cultural affairs, but since Beckman Auditorium has been constructed and it has such a wonderful program—lectures and concerts and so on. Caltech's name is tied to that.

HAHN: Yes, this is true, but the spirit of doing things for the cultural and educational benefit of the city pre-existed the Beckman Auditorium, because the Earnest Watson lectures, the Monday evening free lectures, were given many, many years prior to the Beckman Auditorium. They were always given in lecture rooms around the Institute. I remember the first one I attended was over in the Norman Bridge Laboratory [of Physics], and there was a small lecture room there. So, these free lectures and events that encourage public support for education and cultural things had gone on at the Institute for a long time and still continue.

POWELL: You don't know who started that?

HAHN: I have no idea. Of course, it must be remembered, as one looks at the Board of Trustees over the years, they were all people who were interested in all these other things.

POWELL: A broad spectrum of men devoting themselves to thinking about what was good for Caltech.

HAHN: Exactly that.

HERBERT L. HAHN**SESSION 4****January 20, 1981****Tape 2, Side 2**

POWELL: Would you like to start this morning telling us about Phil [Philip S.] Fogg?

HAHN: Yes. Phil came to Caltech about 1929 or 1930. He had studied civil engineering at Stanford and after graduation went to Harvard Business School, and after that to Wall Street to work in some securities firm. Then, for reasons I have forgotten, he came out to Caltech as an assistant professor of business economics. I well remember my luncheons with Phil in the 1930s, when I was greatly agitated over inflation in the style that the then President and Congress were putting into effect, and I discussed it with Phil. He had been going to various of our clubs and organizations in Pasadena, lecturing on the federal budget, and had charts to show just what it was and had been and a projection of where it was going if the present course was followed. I say "the present course"; I mean the course then, in the middle 1930s.

Phil still continues his interest in the Institute. He was the first registrar of the Institute. Before that, the duties were carried on by some member of the faculty, rather informally. And while registrar, [he] instituted the proceeding which continues—that members of the Caltech faculty go all over the United States to interview students who have applied for admission, and talk not only to the students but wherever possible to their instructors in high school to try to make sure of a student's motivation and capability. Hardly any other institution in the United States does that, but Phil initiated it, and it's still going on.

POWELL: How did you become acquainted with him?

HAHN: Well, through his lectures to some organizations that I came to. I had no very active connection with Caltech then, excepting as I did legal work for various [members]

of the faculty and trustees. But I was not officially involved in Caltech affairs at that time.

POWELL: George [W.] Green was another man you were going to talk about.

HAHN: George was business manager I imagine back in the 1950s. I well remember an incident with George. When I say he was business manager, that includes being chief accountant. Over in the San Rafael hills, there was, and still is, the earthquake laboratory, called the Seismological Laboratory in academic circles. Somebody left us a house nearby, and it was desired by the geology department to use that house for offices for those interested in the earthquake laboratory, and we applied for a special zoning variance, because that is in an R-1 zone. All of a sudden, the neighbors rose up and there was a tremendous outcry against us there. Really, the foundation of it was that our outdoor housekeeping—the plants and the roads and the appearance of the place—was not very good, and they did not want to have another residence in the neighborhood as illy [poorly] kept as our earthquake laboratory.

So, George and I got in his motorcar one morning and took a tour over the area out there to see what this would tell us [about what] was behind this opposition. It became only too clear that they wanted us to keep our premises in the same beautiful condition that all the other places were there. That also led to our observation that the razor manufacturer had a real good idea, which was that if you're going to be sharp you better look sharp. So George dressed the place up, and got it all cleaned up and looking good, and also added to the budget for upkeep of the grounds and the buildings at California Street, and that rather changed the budget attitude on what we looked like.

POWELL: That changed the attitude of the neighbors? Up in San Rafael?

HAHN: It did, and they came around and went with us on it.

POWELL: Here again, what was your reason for being with George Green at that time? Were you more or less advising?

HAHN: We were representing Caltech before the City Planning Commission in the matter.

POWELL: Legally?

HAHN: Legally, yes.

POWELL: These people had gotten so upset that they were ready to do something?

HAHN: Yes. We wanted to go out and tour around and see if a message would come to us, and it came only too clearly.

POWELL: Ed [Edward R.] Valentine was another important person in Caltech's prestige.

HAHN: Soon after the end of World War II, Ed Valentine came on the Board of Trustees at Caltech. Ed had been a geology major at Stanford and was interested in his family's interest in the Fullerton Oil Company, which his father ran—that is, he was the president of it—and it was a concern that had some wealth. Ed worked with that until a point perhaps in the 1950s when it merged into some other concern, and from there on Ed had no employment except to take care of his own rather substantial financial affairs, as well as helping the Robinson family—that is the dry-goods store, the J. W. Robinson Company. His mother was a sister of J. W. Robinson and had a considerable interest in the Robinson stores. So, Ed took care of everybody else as well as himself. Not only that, but his wife Mary [Urmston] was a descendant of J. H. Robinson and had an interest in the Robinson stores. He later gave his interest in the Robinson stores to Caltech and considerable additional sums of money and property.

He was a very important member of the Board of Trustees. When Ed spoke in meetings, like [in the advertisements for] E. F Hutton and Company, everybody listened. He was a very simple and straightforward thinker. Great leader. A man of such principles of honesty that his impression on people who were with him at a meeting was that you would just hate to do anything or say anything that Ed would feel was beneath

you. He was an amazing fellow. He was on the board of the Huntington Hospital as well, gave it lots of money. Tremendous leader.

POWELL: His name is not on any of the buildings at Caltech?

HAHN: No, there is nothing there that registers his importance to the Institute.

POWELL: Or the money he gave—that was not set aside for anything in particular?

HAHN: No, nothing in particular. It was just there for general purposes. I don't recall that it was restricted to anything.

POWELL: He was a very modest man?

HAHN: Extremely modest. Over at the Huntington Hospital, after he had to retire because of his affliction with emphysema, a new building was constructed and he was asked permission to put a sign on the outside that it was the Edward Valentine Building, and he refused to permit it. The directors always called it the Valentine Building—and it still is called that—but the sign was not erected. He was a very modest fellow. He didn't want any credit. He was one of the most important men Pasadena has had. Of course, his father was one of the dominant men of San Marino. Henry Huntington drew around him such men as Ed's father and Mr. Lacy [Richard H. Lacy], for whom a park down there is named. Men like that dominated San Marino and made it what it is. A great family.

POWELL: And he lived in San Marino?

HAHN: San Marino.

POWELL: Another important person is Arnold Beckman.

HAHN: Well, Arnold was one of the greatest men. I would think the sum total of all Arnold's abilities and good characteristics would be that if I had to name the five greatest

men I've ever known, I couldn't leave Arnold out. I don't need to say anything about his capabilities; others will speak to that. I'm sure Arnold will not speak to it. He is an extremely modest fellow and so extremely considerate of other people.

I remember one day he and Mabel were taking me out in their automobile to the Smoke Tree meeting of Caltech trustees, and we stopped at an oil station to get gasoline, which was some distance from Newport Beach, where he lived. And the attendant there presented him with a card which advertised the fact that they fixed brakes and transmissions and did tune-ups and all that kind of thing. Incidentally, we were riding in a brand-new Continental at the time. And so, Arnold didn't do what I would have done—brushed the attendant off and said, “Well, I live a long way from here,” or something like that. “I don't have any use for it.” Not at all. Arnold smiled and said, “Well, thank you very much, I'll keep that in mind,” and put the card in his shirt pocket. Well, you know, when you back off and stop and think about that, the concern of Arnold for the feelings of that strange oil station attendant was just typical of Arnold's relationship to all human beings. A quality that very few have.

He always was so considerate of his friends. After I had a problem that reduced my ability to drive to meetings and things of that kind, every time there was a meeting at Smoke Tree he would call me on the telephone and ask if he and Mabel could take me out there, and they did this several times. This was typical of Arnold's consideration.

POWELL: Was he a neighbor of yours? At Newport?

HAHN: Yes, he lives over about a mile or two from me there.

POWELL: So, did you see him from time to time?

HAHN: Oh, yes. Arnold, as chairman of the [Caltech] board, of course had many policy decisions that he had to join in, and at times the answer was not as clear as one would like it. He would need someone to discuss it with, and I had the privilege of having him call me and ask me to come to his house. In fact, his consideration for others was such that he would always ask to come over to my house and never asked me to come over to his.

This was Arnold all over, and I don't know when I've met a man that made a greater impression on me than Arnold Beckman.

POWELL: Did you sometimes walk on the beach together?

HAHN: No, we would sit in his living room, which looks out over the ocean, or sit on the front bricks of my place, which looks on the bay.

POWELL: And you acted as a kind of sounding board for some of his problems?

HAHN: That's it exactly. That's it exactly. I remember an evening when he and Mabel drove me down to the Palomar Observatory when we had a joint meeting with the trustees of the Carnegie Institution in Washington. In the room where the telescope is, the caterers brought in dinner, and we had a joint gathering together there. I remember, returning from there in the evening, Arnold's discussion of some surplus wealth that he and Mabel had, and his concern over how to guard its use, according to his idea of what was important and beneficial to the country and to society in this country. That's been a constant thing in his mind. And always thinking of Caltech and its future.

I remember in one of these discussions with him, his remarks that Caltech had had a very great success in the physical sciences, this all occurring from the twenties on up to when we were discussing it, which was probably in the 1950s, maybe the early 1960s. What he was thinking of was how could Caltech do something in the future that would keep it important and dealing with something that was new and not old. Well, it was like a fellow said at one of our gatherings—that Caltech was regarded as the equal of any institution of its kind in the world but that everything either went up or went down, and the question was how in the world would Caltech keep up that, which was a very serious thing. So [Arnold] declared that the future of Caltech's importance and advertising would be in biology, and he has given the money for the present study of behavioral biology. He has given very large sums of money in that direction, because he felt that in the next fifty years that would be the great thing in science and take the place in importance of physics, which has been the great thing in the last fifty years.

POWELL: All right. Shall we go on to Henry Dreyfuss?

HAHN: Henry was interested in people. Henry, as you know, was an industrial designer, also a building designer, interior designer of buildings, well known all over the world. Henry was a Jew, a great one. On the other hand, at Caltech, outside of being interested in the design and looks of the buildings there, he was interested in the students. He was chairman of a committee of trustees that was appointed to see if the trustees could get closer to the students. I remember a meeting with that committee, and Bill Zisch was on the committee also. Bill has always had a great interest in the students. The president of the student body was a Jewish boy. And out at the Palm Springs meeting that particular year, the boy had delivered an address to the Board of Trustees and explained to the trustees that they ought not to be meeting at the Smoke Tree Ranch because the Smoke Tree Ranch would not permit the membership of Jews. I said to the boy, "I didn't know you were a Jew." He said, "Yes, I am." And Henry then spoke up and said, "Well, Herb, you know, you wouldn't understand what this means to us." He spoke with great feeling about it, and yet he did not object to meeting there, because we took over the whole club. We had control of the club, and there was no prohibition against Jews being there while we had control.

Henry, I believe, never went to college; he started in as a window dresser in a New York department store, was a self-educated man—a great, great man, of great value to the board.

POWELL: When this young man spoke to the trustees, was this a part of the effort to get the trustees and the students better acquainted?

HAHN: It was, yes, because the idea was to have the students participate in this annual meeting of the trustees.

POWELL: But that did not continue for any time, or is it still continuing?

HAHN: Why, I think it still continues.

POWELL: Is there anything else that you recall about Henry Dreyfuss?

HAHN: Well, the unfortunate ending of Henry's life and that sort of thing is well known, otherwise.²

POWELL: Oh yes. I thought maybe you might have some anecdotes.

HAHN: No, I don't have any others.

POWELL: Tom Watson [Thomas J. Watson, Jr.]. I'm calling him Tom very informally, because you do.

HAHN: Well, everyone calls him Tom.

POWELL: Would you like to talk about him?

HAHN: Yes, there again like Arnold, if you talk about men who impress you as being the greatest, you never can leave Tom out. I've known Tom for twenty years. He came on our board in 1961. He is currently Ambassador to the Soviet Union. Tom, again, is one of those thoughtful fellows that is so devoted to his friends, so modest, and he just seems to have time to do everything the nice way. When I had a coronary heart problem, up in Nevada City, California, some fifteen or more years ago, I was for a month in a little twenty-bed miners' hospital there, and one of the first letters I got from any trustee was from Tom. He had a facility for just thinking, thinking, thinking all the time. I sat next to him many times at board meetings. I think also in this regard of Steve [Stephen D.] Bechtel as well. They each had little note booklets in their pockets, and repeatedly, while the meeting was in progress, they would each pull out the booklet and write down a note of something that occurred to them that they didn't want to forget. Then I will assume that these notes were given to an executive secretary who kept everything in order and reminded them of what to do. I remember an occasion of that kind when I was talking to

² On October 5, 1972, Henry Dreyfuss and his wife, Doris, who was dying of cancer, committed suicide together by running the car in the closed garage of their house in South Pasadena—ed.

Tom about a book that was out of print that I knew he was interested in; it related to Eskimos in northern Greenland. He said yes, he knew about the book and had it, that it was out of print, and probably somewhat hard to get. I then remarked to him that if he could look in his book and get me the name of the publisher and the exact name of it, then I would have the book furnisher here in Pasadena find it for me somewhere. And lo and behold, just before Christmas, a month later, in came the book in the mail. Tom had evidently made a note of it there in his little book, and had his secretary go get the book for me and send it out to me. This is the kind of fellow Tom is. No fuss about him. Just a modest great thinker.

He and Olive, I remember the last time I saw them, it was a few years ago, just before the Palm Springs meeting, and an event was held at the Athenaeum greeting our new president, Murph [Marvin L.] Goldberger. And when I got there, and I wasn't feeling too well, the first people who came over to greet me were Tom and Olive Watson. They had flown the red-eye airplane from London the night before, in order to get to the Caltech meeting. Now, Tom is a busy man, and he has other work to do. And why in the world is it that he would have such a deep interest in Caltech, for him and Olive to inconveniently get in an airplane overnight and spend a sleepless night to get out to a Caltech gathering?

POWELL: He's representative of these men who are national figures who have gone on the board of Caltech in recent years?

HAHN: Yes.

POWELL: He is not a California man?

HAHN: Oh, no. Tom came from New Jersey, went to Brown University for his education, and his father was the man who organized, originally, IBM, out of three other companies.

POWELL: And he is still on the [Caltech] board?

HAHN: No. When he became Ambassador to the Soviet Union, he felt he must resign, and I only hope that when he resigns as ambassador he will come back on the board at Caltech. It would be a tremendous loss if he failed to.

POWELL: This, more or less, brings us back to the question of why these men have done this, perhaps going back to the very earliest ones like [Arthur Amos] Noyes and Millikan. Could you make a few comments?

HAHN: Well it's one of those mysteries that fascinates me, because I don't have the answer for it. And I suppose I never will get it. But we come back to the fact of that original building down in the orange grove at California Street, back in 1910, and shortly thereafter [1919] came Noyes, from MIT. Now, that was a strange thing, because Caltech was not a wealthy place, had only a handful of students, and yet here was a chemist of national, perhaps international, stature that chose to come out and cast in his lot with Throop at California Street.

Then again, a few years later, Millikan did the same thing. Then shortly after that—meaning by that, the late 1920s—Billy Munro abandoned Harvard to come out and set up the Humanities Division at Caltech. I have read Robert Millikan's correspondence with Billy leading up to this change. The [Caltech] Archives have this correspondence, and Rob Millikan really didn't try to sell Billy on the idea, he was just pointing out that this was a great opportunity. For goodness sake, a few buildings on California Street and a few thousand dollars of money available, and here comes another man out from a great institution and joins up. Then you can just keep on going after that. [Thomas Hunt] Morgan, the great geneticist, the biologist, came out.

Then you come to your Board of Trustees. Back in those times, the Board of Trustees were local men and from Los Angeles and Southern California. After we began to get some national figures on the board, we had a tremendous change in the nature of the Board of Trustees—from local people to where we have no active member on the board who is simply a Pasadena business or professional man. Many of them are from the Middle West and from the East Coast and from up in the north, the Bay Area particularly.

POWELL: Didn't you propose this question to one of the trustees recently?

HAHN: Oh, yes, at a dinner over at Stan [R. Stanton] Avery's house. I was sitting there with Ben [Benjamin F.] Biaggini, who runs the Southern Pacific Railroad Company, and there were some others standing around, and I was asking Ben why in the world he spent the amount of time he did, and does, and had the interest in Caltech that he does. He's being paid to do a job for the Southern Pacific railroad, and it takes a little time to do that job. So, he said, "Well, college education changed my life, and I want to do it for some others."

POWELL: So, what Caltech is today certainly bears out the faith that all these men have had in the Institute.

HAHN: Yes, it does. It has been continually on the up, but the question is, how can it stay there?