

THE HATFIELD BROTHERS, RAINMAKERS

Paul A. Hatfield

Interviewed by James V. Mink

Completed under the auspices
of the
Oral History Program
University of California
Los Angeles

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[Photograph of Paul Hatfield by James V. Mink]

INTRODUCTION

Paul Alden Hatfield, brother of the rainmaker Charles M. Hatfield, was born on June 23, 1886 of Quaker stock. Their father, Stephen E. Hatfield, had begun his career as a schoolteacher in New York but soon moved west to Davenport, Iowa, where he met and married Marie Mallory in 1869. The Hatfields then moved to Fort Scott, Kansas, where he entered the sewing-machine business. While living in Fort Scott, their son Charles Mallory Hatfield was born on July 15, 1875. "Charley," as he was called by the family, was later to become famous as Hatfield the Rainmaker.

The Hatfield family moved from Fort Scott to Minneapolis, Minnesota, where Paul was born. When Paul was six months old, his father decided to bring the family to California. The elder Hatfield had become involved in buying property to improve and sell at a profit, and he continued this activity in California. At first, they lived in different parts of San Diego, and for awhile on a 40-acre ranch near Fallbrook. They next lived in various places in the Pasadena area and by 1903 had settled on a city block in Inglewood.

During the course of the Hatfields' numerous migrations in the Southern California region, Charles Hatfield had begun to take an interest in meteorology and chemistry. He

was particularly interested in the climate of the coastal areas which produced a great deal of moisture in the form of fog but comparatively little rain. He believed that procedures could be developed to induce rainfall artificially, especially when considerable amounts of moisture existed in the form of fog.

Charles Hatfield's first rain-inducing experiment was carried out in San Diego where he produced .12 to .15 of an inch. However, the first significant experiment was carried out in April 1903 on his father's property in Inglewood. For the purpose, he erected a wooden tower thirty feet high on the premises and placed his rain-inducing chemicals on a platform at the top. This experiment yielded .3 of an inch of rainfall in the Inglewood vicinity.

Following the Inglewood experiment, Paul Hatfield began to take a growing interest in his brother's work. He was allowed to accompany him on the next experiment which took place the same year up in Big Tujunga Canyon. Charles believed that the low-lying area around Inglewood inhibited his ability to induce rain; so the two brothers went into the Big Tujunga area, set up their equipment, and over a five-day period produced 1.25 inches of rainfall.

Assured of success in his attempts to produce rain, Charles Hatfield began to let others know what he was doing.

He was able to interest a number of businessmen from the Fourth and Spring Street area of Los Angeles in making up a purse for an experiment which would prove his ability. The purse for the first contract was fifty dollars. The results obtained were over 1.65 inches of rain for the Los Angeles region, after the Hatfields' equipment had been placed in operation in the neighborhood of what is now the corner of New York and Honolulu avenues in La Crescenta.

Successfully launched in the rain-inducing business, the Hatfield brothers next undertook a series of contracts which soon made them known internationally. From the gold-fields of the Yukon to the banana plantations of Honduras, wherever or whenever conditions of drought and water shortages called for rain inducement, the Hatfields were on the scene. For a period of over thirty years, they carried out over five hundred contracts and, according to their records, experienced no failures.

In the following pages, which consist of tape-recorded interviews made with the UCLA Oral History Program, Paul Hatfield recalls in his own words, his early life, his associations with his brother Charles M. Hatfield, and the various rain-inducing contracts they worked on together. These recollections are part of the Program's series on local history. Records relating to the interview are in the office of the UCLA Oral History Program.

INTERVIEW HISTORY

INTERVIEWER: James V. Mink, Director, Oral History Program, UCLA; B.A. and M.A., History, UCLA; B.L.S., School of Librarianship, University of California, Berkeley.

TIME AND SETTING OF INTERVIEW:

Place: Paul A. Hatfield residence, Pearblossom, California.

Dates: May 7-9, 1969.

Time of day and length of sessions, and total number of recording hours: The recording sessions were conducted from 10 a.m. - 12 n. and from 1-3 p.m. on May 7 and 8, and from 10 a.m. - 12 n. on May 9. Each session yielded from one to one and one-half hours of recorded time. This manuscript represents a total of five and one-half hours of recording time.

CONDUCT OF THE INTERVIEW:

Paul A. Hatfield was approached, following a phone call from Ernest Siegel, Librarian, Los Angeles Public Library, who indicated that Mr. Hatfield had presented the Library with the original scrapbooks documenting the Hatfield brothers' career in rain-inducing activities. Mr. Hatfield stated in his letter of presentation that additional information could be obtained through a personal interview. The interviewer researched the Hatfield scrapbooks and obtained permission from the Library to take them to the interview. In advance of the interview sessions, he also submitted to Mr. Hatfield an outline of the subjects to be covered in the interview. Mr. Hatfield was first asked to discuss his family background and his youth, with particular emphasis on his relationships with his brother, Charles Mallory Hatfield. The remainder of the interview was organized within a chronological framework in which Mr. Hatfield was asked to recall the circumstances of the various rain-inducing contracts which he and his brother undertook, as well as their experiences in carrying them out.

EDITING:

Editor: Winston Wutkee, Assistant Editor, UCLA Oral History Program. The transcript of the interview was checked against the original tape recordings and edited only for spelling, punctuation, and syntax. All proper names were verified wherever possible, and those which the editor was unable to verify were referred to the respondent. The transcript was reviewed by the respondent, who made no changes. The transcript was returned to the Program on April 15, 1971. The index was prepared by Joel Gardner, Assistant Editor, UCLA Oral History Program. The introduction and interview history were prepared by the interviewer.

SUPPORTING DOCUMENTS:

The original tape recordings and the edited transcript of the interview have been placed in the University Archives and are available under the rules governing the use of the University's noncurrent records.

The original photographs which have been reproduced and bound with this transcript are in the possession of the respondent.

A positive microfilm of the scrapbooks compiled by the respondent and presented to the Los Angeles Public Library is in the Department of Special Collections (FILM 155/118).

TAPE NUMBER: I, SIDE ONE

MAY 7, 1969

HATFIELD: I was born in Minneapolis, Minnesota, June 23, 1886. Charles Mallory Hatfield was born July 15, 1875. Now my father, Stephen Elijah Hatfield, was born in 1843 at Macedon [Center], New York. My mother, Marie (Mallory) Hatfield, was born in Amsterdam, New York in 1847.

MINK: Your brother was about eleven years older than you?

HATFIELD: He was, exactly--almost to the month of it.

MINK: What are the first recollections that you can recall of family life, the first things you remember about your home life, your mother, your father?

HATFIELD: Well, about the first was when we were in the Hollywood district, on the old ranch. I was about six years old at that time. I remember the boys across the street, where the Los Angeles City College now stands. I could see people over there baling hay. Imagine that; that's going back some.

MINK: Yes it is. Was that ranch located on Melrose Avenue?

HATFIELD: It was right down at the corner of Vermont Avenue and Melrose, and those people had one-hundred and sixty acres in there. My father was across the street and had ten acres in apricots.

MINK: You don't remember coming to California? Do you

remember your parents bringing you?

HATFIELD: No. I was only six months old [1886] when they arrived in Los Angeles.

MINK: Did they ever talk about coming out here and how they came?

HATFIELD: I heard them talk about it. From what they say, my father was kind of a pioneer. He liked to roam around. He'd buy one place and sell it--that is, he'd live there a few years and then he'd move on and buy another one. That's the way he made his money in those days. He didn't make much, maybe \$300 or \$400 or \$500, which would be equivalent to a whole lot today.

MINK: Do you remember him telling you about how they decided to come to Los Angeles?

HATFIELD: Well, they were really bound for San Diego, but they stopped over in Los Angeles for a few days at the old Natick House up on First Street, and then they decided they'd go on down to San Diego. When they got down there, they bought three lots and built three houses at Sixteenth and Broadway. And the last time I was in San Diego [I saw that] two of those houses were still standing.

MINK: How long did you live in San Diego?

HATFIELD: Well, that'd be pretty hard to say. I don't remember exactly, but I do remember this. I don't remember

it, but I heard my brother Charley say that he used to sell newspapers on the corner of Fifth and Broadway. John A. Logan was a general in the Civil War, and he died at that time [December 1886]. My brother hollered out all about the death of John A. Logan, and he sold sixty-five newspapers and he thought that was great, because people wanted to read about John A. Logan. He was a wonderful man.

MINK: When your family moved down to San Diego, was Charles born in San Diego?

HATFIELD: No, he was born over in Fort Scott, Kansas. Charley was eleven years old at that time in San Diego [1886].

MINK: Charles was brought from Fort Scott out here.

HATFIELD: Up to Minnesota.

MINK: And where in Minnesota did they go?

HATFIELD: Well, they lived on Nicollet Avenue. They lived almost across the street from the Pillsburys, who were the famous flour people.

MINK: And this was in Minneapolis?

HATFIELD: Yes, right in town. Of course, today that's all changed. That's a great big city. That was way back in 1880. Well we left there in 1886, you see.

MINK: And then from Minneapolis they brought him to Los Angeles and then to San Diego.

HATFIELD: Yes.

MINK: Did you ever hear him talk about that period before you were old enough to remember? About his interests? What kind of a fellow was he?

HATFIELD: Well, he was just about like myself. We were just about the same. You see, there were four brothers, and the two others were altogether different.

MINK: How were they different?

HATFIELD: Well, actually you might say that about any family. They weren't interested in weather. They were interested in other things.

MINK: Like what?

HATFIELD: You mean what they were doing?

MINK: What were their interests in life. How did they differ from yours and Charley's.

HATFIELD: Well, the only thing I could say is that Charley and I would get hold of something and we'd stay with it-- one thing. They were more on the tipping around type.

MINK: Were they more like your father then?

HATFIELD: That's it.

MINK: What kind of work did they finally go into?

HATFIELD: Oh, different things.

MINK: Building?

HATFIELD: Farming and things like that.

MINK: Were they older?

HATFIELD: One was younger and one of them was the oldest.

MINK: What was his name?

HATFIELD: Stephen.

MINK: That was Stephen?

HATFIELD: He was named after my father.

MINK: How much older was he than Charles.

HATFIELD: He was sixteen years older than myself. He was born in 1870. I had a sister, too. Her name was Phoebe.

MINK: She was the younger sister?

HATFIELD: No. She was the second to be born. She was born in 1872.

MINK: Now you said there was Stephen?

HATFIELD: Stephen G. [Girard]. His middle initial was "G" so we wouldn't get him mixed up with my father. He was born in 1870 at Davenport, Iowa.

MINK: Besides Stephen and you and Charley, was there another brother, too?

HATFIELD: Joel. He was the youngest.

MINK: How much younger was he than you.

HATFIELD: Well Joel was four and a half years younger.

MINK: So the oldest brother and the youngest brother were slightly different, and you and Charley were the middle brothers.

HATFIELD: That's it.

MINK: Did Charley interest you in weather? How did you get interested in weather?

HATFIELD: In weather conditions?

MINK: Yes.

HATFIELD: Well, just naturally. When Charley first started in 1902 on my father's ranch, when I was, you know, a young fellow of about fourteen, I wondered what he was doing. Finally, he told me what he was doing. So, I used to go with him on trips for certain things, you know, like chemicals.

MINK: Well, what was Charley doing at this point?

HATFIELD: Well at that time he was working for Robert B. Moorehead on South Broadway at the New Home Sewing Machine Company. He was a salesman. He was a dandy, too.

MINK: He really made a lot of money?

HATFIELD: He had a nice way, you know. He'd meet the women and sell machines. There used to be a lot of that in those days.

MINK: Was he a personable sort of fellow?

HATFIELD: Oh, yes. Everybody liked Charley.

MINK: Would you characterize him as an extrovert? Was he quiet?

HATFIELD: He was very genteel. He'd do most anything for anybody. He was that type.

MINK: But was he quiet or was he outgoing?

HATFIELD: Well, he was quiet in a way; but if you got him started, he was all right. He was good. You could get him worked up. But he was a deep thinker, always studying. He was great on books, especially encyclopedias and books like that.

MINK: Well, did he ever tell you how it was that he got interested in weather?

HATFIELD: He figured it out by himself. The dry years in the West was one of the main things that brought it on. If we'd have lived in Minnesota, he'd have probably never thought of it. But we'd been having these dry years, having so many years with this kind of weather, the water levels had gone way down from what they used to be. Therefore, he began to think and think and put two and two together and figured the thing out. Then I got on to it, you know, by association with Charley when I was just a kid.

MINK: I know in one article that I read, that when Charley was in San Diego he was particularly impressed with the amount of moisture in the air, and yet there was little rain. Did he ever talk to you about that?

HATFIELD: Oh yes. That's humidity--humidity, then fogs. Along the coast there are lots of fogs and mist--condensation of fog is all that is. It's under low pressure. You had it here just a few days back.

MINK: Yes we have.

HATFIELD: That's very common. But you don't get a measurable amount. That's one thing he'd have liked to do-- go back to London where they have those heavy fogs and operated. He would have condensed the fogs and done away with them. It's easy enough. If left the way they were, those fogs hang on and hang on and hang on. Like I say, it was a mist coming down. All the time, you can feel it. Even on the windshield, it'll gather; being warm inside and cool on the outside it condenses on the windshield.

MINK: I noticed also that there was a treatise on meteorology that was among the things that you gave to the public library. Did that belong to Charley?

HATFIELD: Yes it did.

MINK: Where did he get his books in San Diego? Did he get them from the library?

HATFIELD: There's no telling where he got that book.

MINK: This particular book happens to come from the Holmes Book Company in Los Angeles, and he bought that in L.A. But when he was in San Diego in his teens, did he go to the library a lot?

HATFIELD: That's where he hung out most of the time.

MINK: At the public library?

HATFIELD: Sure. Not only down there but other places.

MINK: Was his main interest in meteorology books?

HATFIELD: Well, he was mainly interested in precipitation and inducing rainfall by artificial means.

MINK: Did he ever tell you that he had ever seen anyone else do this? There are a lot of people who have induced rainfall.

HATFIELD: No. Nobody has done this kind of work--not a soul. Up to date there's been nobody. The only ones in the early days were a few who exploded dynamite, and that's about all. Since then, all these different ones have been operating with dry ice and silver iodide. But they only claim to get maybe five percent. Well, we increased the rainfall from one- to three-hundred percent. We had nothing to do with dry ice or seeding of clouds. That's a joke.

While we are on that subject, our own United States government has spent \$100,000,000 and over today, and almost have given the whole thing up as a bad bargain. That's by cloud seeding, now. I can show you articles I have written by the chief of the United States Weather Bureau.

MINK: And your work didn't involve seeding of clouds?

HATFIELD: No. We had nothing to do with it.

MINK: I see. Did Charley ever tell you he'd seen these earlier experiments with dynamite, or had he just read

about them?

HATFIELD: No. He never did. He read about them in the 1890's. After the Civil War some of these generals and others that were in the war thought that concussions in the air probably induced rainfall. Well, it might have to a certain extent. But they thought rain could come only if there was an explosion. You see the point. Well, in our work when we're operating--here today, we'll say--we'll guarantee to have rain not to exceed the sixth day, you know. It'll cover fifty to a hundred miles around in all directions. Imagine that.

MINK: Charley, having studied this, you know, and having read about it in books, and being in the public library, was it on the farm then in Los Angeles that he first began to make the experiments? And what did he do? What were the first things that he did that you could remember when he was working?

HATFIELD: Well the first thing he had to do was build a tower. We tried experiments down below, you know, first in 1903.

MINK: In San Diego?

HATFIELD: Yes. But he used to operate on top of my father's windmill tower.

MINK: He started there?

HATFIELD: Yes, in April of 1903. He produced at that

time somewhere around .12 or .15 of an inch. Now the next test was in Inglewood in 1903. We moved to Inglewood, and my father bought a whole block, and Charley built the first tower down there. It was thirty feet high. I have a picture of that.

MINK: Where'd he get the lumber?

HATFIELD: Inglewood Lumber Co. It was delivered by muleteam. That was in September of 1903. And that was quite a rainfall. That was about .23 or .30, something like that. And then we conceived the idea that the elevation down there was pretty low. We said, "Let's go up in the mountains." So we went up on Los Angeles Street. We used to use horses in those days in 1903, you know. We rented three horses. In fact, I had an old army horse, and we went up to Big Tujunga Canyon. We went way up the canyon as far as we could go. And we stayed up there five days and conducted a test there and got over a inch and a quarter of rain. It never went over the sixth day, even with our experiments.

MINK: You spent five or six days up in Big Tujunga?

HATFIELD: Yes.

MINK: You took a horse?

HATFIELD: We took three horses.

MINK: And a wagon?

HATFIELD: No, we couldn't get in there with a wagon.

MINK: You couldn't get in there with a wagon?

HATFIELD: No, no.

MINK: You packed in?

HATFIELD: We packed in and we had a hard time in some places to get through.

MINK: Oh, you went from Inglewood?

HATFIELD: Yes.

MINK: How did you go, up through the Cahuenga Pass?

HATFIELD: No, we went right up the canyon.

MINK: I mean how you went from Inglewood.

HATFIELD: Well, we cut right up through town [Los Angeles], then through the La Crescenta country, then to the town of Big Tujunga. It wasn't much of a place then. And then we went on across up the canyon. There were a few houses way down at the bottom of the canyon where it branches out, but up the canyon there was nothing. There was an old log cabin, and it was gonna rain, and this fellow wasn't there, and the place was unlocked. In those days you had a right to move in. We knew this, you know, so we moved in. We tied the horses outside and it rained, and this fellow had a lot of popcorn there. We popped corn since there was a fireplace and a nice wood burning, until this thing was over. A couple of days later we pulled out and came down the canyon and went home, back to Inglewood.

MINK: Was this the rain that you made?

HATFIELD: Well, it rained.

MINK: Well, what did you do to make it rain? Did you set up a tower?

HATFIELD: No. We took some planks and put them up. Somebody might come along, you know. We were always on the alert about somebody sneaking in. We've had plenty of that since. And then there was a little platform and then we'd fix things. That's what we did up there.

MINK: You put your chemicals up on the platform?

HATFIELD: Yes.

MINK: Did you make a tank?

HATFIELD: Yes. I had little pans. They were little wash basins that fit into one another, so it wouldn't take up any room.

MINK: Oh like a telescope?

HATFIELD: Little round wash basins.

MINK: So did you set them all around on this platform?

HATFIELD: That's it. They were all around, and then when you were through, you could stack them all together. We threw them in a gunny sack and brought them home.

MINK: Do you cut out holes in the platform so you can set these pans down in the wood?

HATFIELD: No, we set them right on top.

MINK: Right on top?

HATFIELD: You set them up here.

MINK: What were these pans made out of? Were they metal pans with porcelain?

HATFIELD: They're made out of galvanized steel.

MINK: Galvanized pans?

HATFIELD: Yes, that's it. If you hit them, pieces come off--that type.

MINK: Where did you get this material? Did you just buy it in the hardware stores?

HATFIELD: These pans?

MINK: Yes.

HATFIELD: You could buy them anywhere in those days. People used them, you know. I've got a couple of them outside right now.

MINK: What did people use them for?

HATFIELD: To wash their faces.

MINK: Can you tell me about how big they were? Were they a foot in diameter?

HATFIELD: Yes, the diameter was about like that.

MINK: It would be about a foot and a half?

HATFIELD: Well the size we used--I got one out there that's that big.

MINK: How many of them did you have sitting up on the platform.

HATFIELD: We had eight or ten.

MINK: When you went up there with Charley, were you looking for a proper kind of a place in which to set this up?

HATFIELD: Yes. We looked for kind of an open spot.

MINK: An open spot with no trees?

HATFIELD: Yes, that's why we liked where this cabin was. It was only a log cabin. Afterwards, we found that it belonged to a man by the name of Hoyt. He was an old prospector. He was prospecting up in that country for gold. There's some gold up there. Afterwards, we found it out.

MINK: Did he know what you were up to?

HATFIELD: Oh, he didn't know a thing about it. They knew somebody had been there. We left a note that said everything's okay. It wasn't our property; it was somebody else's property. We'd expect somebody else to do the same to us. That was a law in those days. You would have a right to move right in as long as you left everything the way you found it. Don't burn the place down like they do nowadays. [laughter]

MINK: How long did you have to wait before you were able to produce rain?

HATFIELD: Usually about the third or fourth day, or the fifth. It just depended on how far conditions were away.

MINK: In this particular, very early experiment that you

did up in Tujunga Canyon, do you remember how long you had to wait?

HATFIELD: I'd say it was three and a half days.

MINK: Well in the process of waiting, what were you doing?

HATFIELD: Oh, we were just sitting around, taking it easy, getting wood. We were looking the hills over and seeing if there were any clouds coming in. That's what you were there for--to produce rain. Nobody knew it, though. Nobody was around. But even if they had been, they wouldn't have known it any way.

MINK: Well, during the time you were there, before you were able to make the rain, how much attention did you have to pay to the chemicals? Did you have to continually keep feeding the chemicals?

HATFIELD: Night and day.

MINK: Did you do it in shifts?

HATFIELD: We'd do it in shifts.

MINK: You'd sleep, and then he would sleep?

HATFIELD: That's it. Especially when it's raining, then you're on the go more than when its just natural evaporation. Everything starts with evaporation.

MINK: About how old were you at this point?

HATFIELD: At that time?

MINK: Yes, when you went up there to Tujunga Canyon.

HATFIELD: I was about seventeen.

MINK: Well, it must have been a lot of fun.

HATFIELD: Oh, it was. Any kid the same age would just be thrilled to be there. And in a place like that there was nobody around. It was wild.

MINK: Did you hunt while you were up there?

HATFIELD: Well, it was getting kind of cool, you see. There were no rattlesnakes and no wild animals.

MINK: What did you have for food? Did you take your food with you?

HATFIELD: Oh yes.

MINK: Well, can you remember anything that Charley said about that experiment? How did he feel about that experiment?

HATFIELD: Oh fine. He was very elated.

MINK: Was this the most rain he produced up until that time?

HATFIELD: Yes, up to that time. Then he came back to Inglewood. Charley told the man he was working for, Robert B. Moorehead, what he was doing. Well, they got together and said, "Let's fix up a little purse for Hatfield and have him go out and produce some rain." That was in February of 1904. They put up a purse of fifty dollars.

MINK: Did he take it up among his employees?

HATFIELD: No. Other business houses got together. A shoestore next door paid five dollars, Moorehead paid five dollars; someone from Gude's, another shoestore, paid five dollars. And the Baker shoe people paid some money. Well, it was fifty dollars. That was a lot of money in those days.

MINK: Why shoe people?

HATFIELD: Oh, I don't know; they just happened to be around that neck of the woods, around Fourth and Spring Streets, around the corner from Moorehead. He knew these fellows, too. He was a sewing-machine shop owner. He was quite a sport. He had a race horse. And these other fellows, I suppose, were associated with Moorehead, and that's the reason, as long as you asked the question. And so we went out in February to La Crescenta, near the corner of New York and Honolulu Street. I moved from right there to here at Pearblossom. I lived on Honolulu Street between Pennsylvania and New York. So we went up there with a horse and wagon; we took a tower right with us. We took a tower and a bunch of lumber and pulled it right up there. And after two days, two hours, and ten minutes, we had rain. It was that quick. Well, it rained an inch and something in Los Angeles, and we had, I think, 1.65 inches. That was our first contract.

MINK: You did this on fifty dollars?

HATFIELD: Fifty dollars, yes.

MINK: Where'd you get your old army horse?

HATFIELD: All along Los Angeles Street from Second Street down to about Fifth there were all kinds of like livery stables. They all had a bunch of horses, and you could rent them. There weren't any automobiles. People rented wagons or a saddle horse. So at one of those places right near about Fourth and Los Angeles Streets we rented a horse.

But that horse was a dandy. When we were coming out, we got about down towards the mouth of the canyon, and we came to a gate. Some farmer had a gate there. Well, you couldn't go on up unless you opened the gate or come back without opening it. So when he came to the gate, he wanted to go over the top. I was riding him, and I could tell this horse was that way. And I was in the lead, but I held him back. [laughter]

MINK: You were about sixteen. This would make your brother about twenty-seven at this point. What did your mother and father think about this? Were they in favor of what you were doing? Or did they feel that maybe what your brothers were doing was more to the point?

HATFIELD: Well, they just thought like most parents. Supposing you had a boy and he was doing something like that, you might say, "Oh well, he's fooling around killing

his time," say, something like that, because they wouldn't be interested.

MINK: Was that the way they felt about it?

HATFIELD: My father never did say as far as I know. My mother thought it was kind of an act of God. There was something behind this, see, because he was so set in his ways that he knew he had it, and therefore, she said it must have been a divine providence. You knew that part.

MINK: Yes. So she felt it was an act of God?

HATFIELD: Yes, that God was kind of helping him out through some unknown power.

MINK: That God had given him this power? I see. She, in general, approved of what was being done?

HATFIELD: Yes. Of course, if they would have known more about it, it might have been different, maybe. But they didn't pay much attention anyway. We'd go out around on these contracts, you know, to experiment; we'd just pack up and go.

MINK: Wouldn't they say anything?

HATFIELD: "All right boys, now be careful." You know how mothers are. Those were wild days, too. We were safer then than we are now.

MINK: You were safer then than you are now. Yes, I think you're right. In your early upbringing, both yours and Charley's, was it a very religious upbringing?

HATFIELD: Very religious?

MINK: Religious. Yes.

HATFIELD: My folks?

MINK: Your family life.

HATFIELD: No, it was open-minded.

MINK: Was your father still engaged in farming?

HATFIELD: No. He never did much farming. He loved to buy places and sell them. That place in Hollywood was only ten acres, and it didn't amount to much. They'd cultivate it and sell the whole crop. Somebody'd come out and buy them. That's the way they did it in those days--take the whole crop for so much.

MINK: Apricots?

HATFIELD: Yes. And he had forty acres in olives down at Fallbrook. They were big whoppers and beauties. He used to sell the whole crop to this Italian fellow down there. They made olive oil and pickled them and all that, and they paid him so much.

MINK: So everyday he was busy off somewhere; he wasn't around the house?

HATFIELD: He [Charley] was studious. He didn't want to be bothered when he had a book or something.

MINK: No, I'm talking about your father.

HATFIELD: My father was always busy doing something.

MINK: So that way they didn't pay much attention to what

you did.

HATFIELD: No.

MINK: Well then, after you finished this La Crescenta experiment which was in February of 1904, what was the next thing you did?

HATFIELD: We went back and collected the money. Charley collected the fifty dollars. They said, "All right, how about if we'll make a big contract?"

MINK: Now who did he collect the fifty dollars from?

HATFIELD: Those fellows that signed the contract.

MINK: The shoe people?

HATFIELD: Shoemen and sewing machine men. Maybe there was another sewing machine man. [tape off]

MINK: After you got back, Mr. Moorehead paid you the purse of fifty dollars and Charley went back to work?

HATFIELD: The signers paid up the fifty dollars, and Charley went back to work.

MINK: What did you do?

HATFIELD: Oh, I don't know what I did do. Well, right away quick we made some money around Inglewood doing something, hoeing corn or something. They raised a lot of corn in those days down there. It didn't make any difference what it was. You only made a couple dollars a day, you know.

MINK: Sure.

HATFIELD: Maybe it was a dollar and a half. That was a lot of coin. Then these guys got together and said, "Well, Hatfield, we'll make out a contract for a thousand dollars."

MINK: A thousand?

HATFIELD: Yes.

MINK: How many people were going to get involved in this?

HATFIELD: Quite a few. So they got together and signed up a contract and we went to Altadena that time. We built our tower up back of the Esperanza Sanitarium. It was up against the hill. You couldn't go any further. It was the big sanitarium up there, owned by a Mr. and Mrs. [F.C.] Melton at that time. They were Germans. So we were up there and they said all right that we could locate there. We had to be near water, you know. They had a reservoir up there, a small one, about as big as these two rooms. So we put up our tower and went to work.

Well, this contract called from December 15, 1904 to April 30, 1905. We guaranteed eighteen inches of rain would fall in Los Angeles during that period. Keep that in mind, now. The amount of rain that actually fell in Los Angeles was 19.54, and in Altadena, where we were, we had 26.49 inches.

MINK: All the time that you were on this contract, where did you stay?

HATFIELD: Right there.

MINK: In the sanitarium?

HATFIELD: No, no. [laughter] Right, I'll tell you from the sanitarium to our place was about as far as from here to the gate, and we had our tents. We had our regular camp there. I'll show you this picture. You must have a dozen of them in the library down there.

MINK: So you were camped out in back in tents?

HATFIELD: Yes.

MINK: Just you and Charley?

HATFIELD: Oh sure. We had visitors every day. They came from all directions, from all over Southern California.

MINK: Who came to see you?

HATFIELD: Every "Tom, Dick, and Harry." We don't know who came to see us. Some scientific men and some might have been government men. We had lots of that, too, all kinds of things. We were always on the alert, you know. They tried to find out something.

MINK: On that 1905 contract, where did you get your supplies from? Were they brought up to you?

HATFIELD: No, Charley would go out.

MINK: Where'd he go to pick up the food?

HATFIELD: He'd go down to the store about three or four

blocks away.

MINK: There were stores up there then?

HATFIELD: Oh yes. There was one store. A fellow by the name of Bridges ran the store. He had a little ranch there.

MINK: During the time that Charley was out on this contract, was he still employed by the sewing machine company?

HATFIELD: Well, he was only employed when he was working. He could go to work whenever he wanted to. He was a good salesman.

MINK: If he said to Mr. Moorehead, "I'm just taking off," he'd say that was fine? He didn't mind?

HATFIELD: Sure. Well, they'd hate to see him go, of course, but they wanted to see rain, too. They were proud that they'd signed the contract, and they paid the bill.

MINK: So you got your thousand dollars?

HATFIELD: Yes.

MINK: That was a lot of money for that time.

HATFIELD: I sure thought it was.

MINK: What did Charley think?

HATFIELD: Well, of course, he didn't get it all though. He had to pay me something. I wasn't just working for nothing. You know, it's just like if you have a brother.

Do you have a brother?

MINK: Yes.

HATFIELD: Well, it's the same principle here.

MINK: How much would he pay you?

HATFIELD: Out of that I got a couple of hundred. That was all right; I was satisfied. That was a lot of money.

MINK: This contract ran from December to April?

HATFIELD: December 15, 1904 to April 30, 1905.

MINK: At the end of this contract, what did you do then? By this time you would have been about eighteen or nineteen.

HATFIELD: That's right, eighteen. Late in 1905, we were at Crows Landing and Newman on the west side of the San Joaquin River, down below Tracy and Stockton. They sent a representative down to interview Charley. They wanted him to come up there and demonstrate on the west side. That's the driest part, you know, on the west side. It's sixty miles across the valley, and it's three-hundred miles long. The entire west side was planted in wheat. So they sent a man down by the name of Bill Munson. So Charley said, "Sure, I'll come up." So we went up there and started the operation on the fifteenth of November and continued until about the fifteenth of April. Some contracts vary. We built our towers five miles west of

Crows Landing back in the Coast Ranges. We wanted to get some elevation. That contract was for fifteen hundred dollars. We went back there year after year. But there was another one. When we came back from the San Joaquin Valley, the Canadian government got to hear about it. So they sent a representative down to Los Angeles to interview Charley. It was a fellow by the name of Lithcox. He was an Englishman. We actually met him one time down at Paso Robles. We signed a contract with him to go up in the Yukon for the miners up there and produce rain in June and July. We did that the following June and July, after finishing up in Crows Landing in April of 1906.

MINK: Did he come to Crows Landing or did he come to Los Angeles?

HATFIELD: He came to Los Angeles.

MINK: Did he come after you'd finished the Crows Landing contract? And you'd gone back to L.A.?

HATFIELD: That's right.

MINK: How did you get from Los Angeles to Crows Landing?

HATFIELD: We took a train up. The Santa Fe goes right up one side of the valley and the Southern Pacific goes up the other side. We took the Santa Fe out of Los Angeles right on up.

MINK: Did you just take your equipment right along on the train with you?

HATFIELD: Oh yes.

MINK: The baggage car?

HATFIELD: Not the lumber and towers.

MINK: You didn't take those.

HATFIELD: All these towns had lumber yards, you know.

MINK: When you got up to Crows Landing, what did you do?

HATFIELD: We met all the boys and the scientists, you know, and maybe that evening we had to make an address. We'd all get together and we'd tell them what we're going to do. Then we'd go to the lumber yard. Everything was made out, you know, by the lumberman--so many four-by-fours and two-by-threes, or whatever you wanted--and they filled it and delivered it out to wherever you wanted it.

MINK: On a horse and wagon?

HATFIELD: Yes. It was only five miles out and back there.

MINK: And so what was your job on these contracts?

HATFIELD: It's what's called being a flunky--cooking, and all that kind of work.

MINK: Did you set up the towers?

HATFIELD: Oh yes, sure.

MINK: Did you and Charley do it together?

HATFIELD: Charley and I, nobody else. We'd do it easy. Sometimes we had four towers, sometimes three, sometimes one, and sometimes two.

MINK: Now on top of the towers you had a large galvanized tank, or did you still use the same pans?

HATFIELD: Well, I'll tell you. They are about as square as this card table, galvanized, and they're about that deep, six inches.

MINK: That would be about an inch and a half deep.

HATFIELD: I've got some out in the garage. I'll show them to you. You take a look at them and see for yourself.

MINK: The size of this card table would be maybe about three-and-a-half feet by three-and-a-half feet?

HATFIELD: Three feet.

MINK: Three-by-three feet?

HATFIELD: Three feet is right.

MINK: How many of these tanks would fit up on top of one of those towers?

HATFIELD: Well, one tower sometimes used four to six.

MINK: Four to six tanks?

HATFIELD: Four to six "trays," we call them. When we had four towers, it took that many more. We'd usually destroy them when we got all through. These were brand-new out there and had never been used.

MINK: After you got through with one contract you destroyed the tanks.

HATFIELD: Oh sure.

MINK: Why?

HATFIELD: Well, that's best known to ourselves. They're made out of a light-grade galvanized material. It doesn't take much. You can see for yourself.

MINK: The idea was that it looked better from the standpoint of the people who were giving you the contracts. The reason you destroyed the tanks was that possibly some traces of the chemicals that were in there might give away the procedures that you use.

HATFIELD: Sure, that's why. But then again you want a nice new bright tray.

MINK: Tell us, how did you destroy the tanks? What methods did you use to destruct them?

HATFIELD: We put them all together. One fits into the other and makes a compact package. And we'd dig a great big deep hole someplace and bury them. And eventually the rain--the ground being wet in the winter time--causes them to rust.

MINK: They would sort of rot away?

HATFIELD: Yes, that's it.

MINK: You would bring the tanks with you wherever you went, or were you able to get those at the place where you carried out your contract?

HATFIELD: Yes, that's it.

MINK: You got them at the place where you carried out your contract?

HATFIELD: Well, sometimes, depending on the size of the city. Now we could get them in Newman, but we couldn't get them in Crows Landing.

MINK: Where's Newman?

HATFIELD: It's about five miles [south] from Crows Landing.

MINK: I see. What were these tanks used for besides what you used them for?

HATFIELD: Well we'd have them made.

MINK: Oh you would order them made?

HATFIELD: Yes. We'd order them made. We'd give them the dimensions, and they'd make them up quick.

MINK: How long would it take you to get them made up?

HATFIELD: Oh, it depended on how fast they worked, or who they were--a day or a week. We always figured on about a week. As far as the lumber was concerned, we'd give that to the man who owned the ranch that we were on.

MINK: It was sort of as an allowance for allowing you to stay there?

HATFIELD: Sure. We didn't want to carry that around. We were coming back the next year, and he'd say, "Well, you're coming back, so leave it here and use it over again." It was common sense, you know.

MINK: Some of these people that you met--you know these ranchers--what were they like?

HATFIELD: They were just common ordinary people, just all good stocks.

MINK: Were they generally receptive to what you were doing.

HATFIELD: They were hospitable people. On the ranches in the early days they'd kill a beef, you know, or a hog, and always brought meat around. They even had goats in some places, and sheep too. And eggs! Boy, they'd bring a whole case. One brought us a whole case one time. I'd say they were very hospitable people; they were all right and good.

When we first went up to Crows Landing, those farmers up there didn't even own the harness on their mules. Most of them had about forty mules, you know, to pull their gang plows. And when we left, of course, they had good crops, and they began to get on their feet.

You know, Simon Newman owned everything. He even owned every ranch, almost. The ranchers had big bills. Some of them had bills of a thousand or fifteen hundred dollars. But they all paid him off. The second year we were in there, 1907, it rained so darn much they released us two weeks before the expiration of our contract. They came out and told us, "Gee, we can't even plow, you fellows get out and get going!" They paid us off and away we went. We went back there the next year in 1908, 1909, 1910, and 1911.

MINK: Well then by the time that Charley and you had been going back to Crows Landing every year like that you must have made a lot of friends around there.

HATFIELD: Oh yes, sure. People were all right. We had lots of company. That's the only drawback, because if there are too many people it produces a nuisance. The greatest gang of people we ever had was when we were down in Texas. One day we had three thousand.

MINK: Three thousand people?

HATFIELD: Three thousand. And one other time when we landed in the Yukon, came down a little ways from White Horse down to Dawson City--it was three hundred and twenty miles down the Yukon River. When we got down there there must have been at least--oh, the whole town was there to meet the first boat down the river. "Where's the rain-maker? where's the rainmaker?" There must have been three thousand. We weren't talking about that now, that comes later. That's ahead of our story.

MINK: Now here in the scrapbook you were going to tell me something about the towers.

HATFIELD: This tower was the one at New York and Honolulu Streets in La Crescenta. We went up there with a horse and wagon.

MINK: There's your tent.

HATFIELD: Yes, that's where we stayed. I've got a picture

of the wagons. We were only there about five days. We went back and collected the fifty dollars. There's that Inglewood tower. That's the first tower we ever built.

MINK: Now this is on the page opposite where the La Crescenta tower is, underneath where it says, "Hatfield has heavy rainfall for sale--tent station in mountains near Altadena."

HATFIELD: There's another thing. You take reporters--they get everything wrong anyway. They get everything twisted. You'll find a lot of these articles--even in books--wrong. I've got books and articles about Charley, but they seem to have trouble getting things right.

MINK: You think this one really is up at La Crescenta, not Altadena, the way he says?

HATFIELD: No. That's La Crescenta.

MINK: Right.

HATFIELD: This is Inglewood.

MINK: That's the tower in Inglewood. Now this tower was located on your ranch?

HATFIELD: Well, this was right in the street. There wasn't nobody there much in those days. My father owned the whole block, anyway. So we put it right in the street. Nobody traveled the street.

MINK: Who built this tower? Did you help build this one?

HATFIELD: Yes. Charley and myself. There was nothing

to it.

MINK: Well, you say there's nothing to it. Did Charley first design the tower?

HATFIELD: Yes, he designed it. Its elevation was thirty feet. Now the next one at Altadena was only about twelve feet high.

MINK: I see. Why the differences in height?

HATFIELD: Well, where we were working there were curiosity seekers. Suppose you had it down here, let's say--this high. Well, everybody would be walking up looking to see in. So if we got it elevated, you can't be rubber-necking.

MINK: I see. So when you were out in the wild country, where there weren't so many people around, you didn't have to build them as high? Is that right, because there wouldn't be many people around to look and see?

HATFIELD: Yes. Like out there in Altadena. Now if we were going to demonstrate right here now, we'll say, we'd build a tower about twenty-four feet high. It'd be about like that, only a little different shape. We get it away from the public by putting a fence around it to keep them out.

MINK: What's this up here on the La Crescenta tower?

HATFIELD: There was a draft while we were in the canyon. That canyon area is now called Hindenburg Park.*

MINK: Yes.

*section of Crescenta Valley Park

HATFIELD: Well, it was right near that canyon, and there wasn't much circulation, so I used net to cause more of a draft.

MINK: What is that?

HATFIELD: That's a kind of like a smokestack. It's about that big around.

MINK: That would be about two and a half feet in diameter.

HATFIELD: That comes over here, then the air comes down through, you see.

MINK: I see. That's a rain gauge, right?

HATFIELD: No. The rain gauge is off to one side.

MINK: What's that thing?

HATFIELD: Oh, that does look like a rain gauge, doesn't it?

MINK: Yes it does.

HATFIELD: But it isn't. No it's not.

MINK: What is it?

HATFIELD: That's just part of that apparatus. I really have forgotten myself. We discontinued it. It didn't do any good.

MINK: It didn't do what you expected?

HATFIELD: No, for drafts, all for drafts.

MINK: To create drafts?

HATFIELD: Circulation and evaporation.

MINK: I see. Now this picture on the Inglewood tower--is

that Charley underneath the tower?

HATFIELD: That's Charles standing there. I took the picture.

MINK: You took the picture?

HATFIELD: Yes, in 1902.

MINK: Did he always want to have his picture taken?

HATFIELD: Well, you always had to have a picture. The reason we took it was that it was the first tower, you see. And that one was second, and I think, the next page is of Altadena.

MINK: There are no other pictures of rain towers at this point.

HATFIELD: No, but there is this article on Altadena.

MINK: Yes. I'm curious about these people. Did you know this person?

HATFIELD: They were reporters. That portrait you mean?

MINK: Yes.

HATFIELD: Those towers are good, aren't they?

MINK: Did you know them?

HATFIELD: Yes. They came up there.

MINK: You met Mrs. Otto Rosenthal?

HATFIELD: Rosenthal. Yes, I remember. Yes, he was one of our first visitors.

MINK: And that's his wife, apparently, who wrote the poem.

HATFIELD: I guess so. And there's another fellow by the

name of Brendenstool. He was a reporter and a fine writer.

MINK: What paper was he working for?

HATFIELD: I think he worked for the Los Angeles Examiner.

MINK: For the Examiner. So these articles here are mainly from the Examiner, you think?

HATFIELD: Well, most of them. There are some from the Los Angeles Times, too. The first article ever printed was in the Times.

MINK: That's right?

HATFIELD: The first one.

MINK: What do you think the first article to ever appear was? You think that this is the first article?

HATFIELD: That one was in the Examiner.

MINK: That was in the Examiner. That's called "Generous Rains Descend From Oregon Coast to Lower California Shore."

HATFIELD: Good cartoonist.

MINK: Do you remember who the cartoonist was?

HATFIELD: No, but he was all right. It's funny they haven't got his name here.

MINK: When did the first reporters start coming around?

HATFIELD: Oh, just as soon as we got established.

MINK: What I'm trying to figure out is how they found out what was going on, and did they hear it by word of mouth?

HATFIELD: The newspapers were full of it. Every day there was an article. It didn't make any difference

whether it was here or up in Alaska, the Yukon, or Canada, or in Honduras, every day there was something in the papers, all the time.

MINK: I see. Were these reporters mostly friendly?

HATFIELD: Oh yes, sure. They were good fellows.

MINK: This that I'm referring to here is the map that is shown in the first scrapbook on about the fourth page. And we see here that Charley has put in his handwriting a circle with 1.64 inches.

HATFIELD: He wanted to show where the heaviest rainfall was in that district.

MINK: And that was on Honolulu Avenue?

HATFIELD: You might say in La Crescenta. That's the very spot at Hindenburg Park.

MINK: That was the La Crescenta contract?

HATFIELD: It was at Honolulu and New York. There's a boulevard stop there now. Then turn to your left. It was right across from there. All the time we were there, there was a bee man. He had two hundred colonies of bees. He was named Metcalf. Later, he got bit by a rattlesnake and died. Nice fellow, too. There ought to be one of the Altadena towers.

MINK: No, there's no picture here of the Altadena tower.

HATFIELD: That's funny.

MINK: Now what's this picture?

HATFIELD: That's the weatherman; that's old Franklin.

MINK: Old Franklin? Tell me about Mr. Franklin?

HATFIELD: George Franklin was a good guy just like anybody else. He'd forecast fair weather and it'd rain.

MINK: Here in Los Angeles?

HATFIELD: That's when we guaranteed eighteen inches for Los Angeles. He predicted rain, and it was fair. It was just the opposite. It was a regular joke on him. These fellows can't do much better today. They only hit about forty percent.

Look at that rain we had the other day. We always listen to Gordon Weir at nights, you know, at about six o'clock. And last Friday he said no rain through Wednesday. That's today. Well, we've had two or three showers. Now last night he predicted no rain through next Monday. Well, we'll see if that forecast is okay.

MINK: This fellow, then, was the weather bureau forecaster chief in Los Angeles at the time when you were carrying on these experiments?

HATFIELD: Yes. Mr. Franklin.

MINK: Did you ever talk to him?

HATFIELD: Oh yes.

MINK: What did he think about what you were doing?

HATFIELD: They all ridiculed it, because it hurts their forecasting.

MINK: I see.

HATFIELD: It jimmies them all up. Wherever we'd been, we always have to laugh at ourselves, "Well, there goes that fellow now, he's shootin' off"--Fresno, Bakersfield, or anywhere around, Riverside. When we were in Hemet, a Riverside fellow was shooting off, because we interfered with his forecast.

MINK: What would he say to you?

HATFIELD: I don't know about that. He just was dumb-founded; we had them guessing, you see.

MINK: What was his name?

HATFIELD: I think it was Miller.

MINK: You were going to talk something now about the Yukon experiments.

HATFIELD: Yes, about the miners up there in the Yukon. Well, we arrived and a great big crowd met us there.

MINK: Before we start about the Yukon experiment, let's start the story from when you left here. Where did you sign the contract, here in Los Angeles with the man from Canada?

HATFIELD: We signed the contract after we got up there.

MINK: Right. But he came to Los Angeles to see you?

HATFIELD: Oh yes, and they paid all expenses. We left here in May. Then we went to San Francisco, just two weeks after the [1906] earthquake. Then we had to hang

around and wait a while. We stayed in San Francisco a week. A friend of ours worked for Wells Fargo and he took us over. My brother used to go to school with him. MINK: How did you get up to San Francisco, on the train? HATFIELD: On the train, sure, to Oakland. Then he took us over. He was a messenger for the Wells Fargo Company. And then we went right from San Francisco on up to Vancouver, and we had a layover there for two weeks to get our boat north. Then we went on up through the islands, you know. The inland passage, they call it. Then we went on up to Skagway, then from Skagway over the little narrow-gauge railroad to Whitehorse, then from Whitehorse we took one of these paddle steamers, you know, up the river three hundred and twenty miles to Dawson City, and then when we got there we met the big crowd, and then we went over to the hotel. We kind of got shined up and went out that evening. We had to go out and eat, you know, because they didn't serve in the hotel. We looked the town over, which wasn't much.

The next day we went out to, what's it called, King Solomon's Dome, a great massive mountain. All these creeks radiate from the top of this dome, and they are lousy with gold. The miners wanted it to rain so they could wash and sluice it out down below. Well, there were five different creeks--Sulphur, Hunker, Bonanza, and Dominion and Gold Run.

We ordered our stuff and they took it twenty-five miles out from Dawson, out through King Solomon's Dome. You could see the midnight sun. You know, it was right there in June. It was the longest day of the year. It was just about my birthday. Mine's the twenty-third, and the longest day is the twenty-first.

So we started operating, and good rains fell. One day we saw a buggy coming with Northwest Mounted Police on horseback, and they pulled up in front and a man got out. He had his wife there with him. He was Mr. Gibbs, who was president of the Bank of Commerce. And he said, "I want to show you something in the buggy, Hatfield, for your good rains," and he pulled out a sack and there was fifty thousand dollars in nuggets! I helped him pull it out; the Northwest Mounted Police went down on the ground. I took a picture of it. And that picture has been handled so darn much by different ones that it's getting kind of kinky. But then we picked the thing up and put it in the buggy. He took photographs of us and we took some of him-- Mr. Gibbs and his wife. He was a nice man. (That's showing you it right there.) And that was just for two days. There were all kinds of cleanups. It was fine that a man like that from the Bank of Commerce, Mr. Gibbs, would show us the cleanup. I think that was just off of one creek. That little creek that ran down there was Sulphur Creek.

MINK: Those nuggets came out of that creek?

HATFIELD: Yes. He went on and took the gold down to the bank, and then they shipped it out.

MINK: Well, was that from a lot of different miners that were working that creek?

HATFIELD: Yes.

MINK: That was their total take?

HATFIELD: Yes, out of this creek--out of Sulphur--not Dominion or Bonanza, or any of those others.

MINK: What did Charley think about that?

HATFIELD: Oh, he didn't think a thing of it. We're used to all that. We began to get used to cleanups and good crops and everything. That was our fourth contract.

MINK: There are a couple of questions that I wanted to ask you. Do you remember the name of the ship that you took from Vancouver up to Skagway?

HATFIELD: Yes, it was the Princess Beatrice. And afterwards it was sunk in the bay of Vancouver. Some other ship rammed her and down she went.

MINK: Do you remember the name of the paddle wheeler that you took to Dawson City?

HATFIELD: It was the Sellkirk. You see, you took the Princess Beatrice to Skagway, and then you took the narrow-gauge railroad to Whitehorse.

MINK: Do you remember the trip? Was it a nice trip?

HATFIELD: Do you remember that cantilevered bridge they had on the narrow-gauge? It's built like this.

MINK: Yes.

HATFIELD: You look way down.

MINK: Yes.

HATFIELD: You remember that, do you. I thought that was wonderful.

MINK: You'd never seen any of these things before?

HATFIELD: Oh no.

MINK: How long were you up at the Yukon?

HATFIELD: About two months.

MINK: And during that period of time--this is something I wanted to ask you about the other contracts--how much of the time were you spending, you know, with the chemicals? And another thing, when you go up on these contracts, how do you go about ordering the chemicals? Can you tell me about this, because if the process is not to be known by anyone, how can you make sure that nobody knows about it, because you have to order the chemicals, after all?

HATFIELD: Yes. Like for the Yukon contract, we were at Vancouver, you see. We were in Canadian territory, and then we'd supply ourselves there and go right over to Dawson City, Yukon--still in Canada, you see. We were smart enough for that.

MINK: Where'd you buy the chemicals, then?

HATFIELD: When we were operating in 1921 in Alberta, we still were in Canada, but we thought of that, and we supplied ourselves over in Vancouver.

MINK: I don't understand. Where did you buy the chemicals, in Vancouver?

HATFIELD: In Vancouver, yes.

MINK: For the Dawson contract?

HATFIELD: For Dawson.

MINK: And you took them up with you on the ship?

HATFIELD: Sure. We checked them and checked them.

MINK: For the Yukon contract, how much of the chemicals did you have to buy? I mean was it a big heavy thing to trek? Or was it light?

HATFIELD: Well, that depends on the length of the contract and what kind of a contract--agriculture contract, filling dams. But for gold miners, they don't want a lot of rain up there in the Yukon. They got moss that thick all over the country. It's like walking on carpet. Wild strawberries are everywhere you go. I guess you know that. You've found that out.

MINK: Yes. Well, how much of the chemicals would you have to take?

HATFIELD: Up there?

MINK: Yes.

HATFIELD: What do you mean: how many pounds?

MINK: Yes, what I'm trying to bring out here is whether you had a lot of heavy stuff to carry.

HATFIELD: Well, it didn't take much, no, a couple of big trunks.

MINK: All the chemicals and materials that you would need for that two-month contract in Dawson, you could fit into a couple of trunks.

HATFIELD: Yes, that's about right.

MINK: And how did you get them up on top of that dome?

HATFIELD: Oh, they hauled them out.

MINK: By wagon?

HATFIELD: Yes, we went right along with them.

MINK: And did you camp out there on the dome?

HATFIELD: Yes. We had a regular camp, nice, just as light as this, both day and night.

MINK: You said this was on top of a dome?

HATFIELD: Right up on top. We could look all over in every direction.

MINK: Was this a rock dome, or was it of solid rock.

HATFIELD: Oh no. It was dirt covered with moss.

MINK: Moss. Then trees?

HATFIELD: Yes.

MINK: Trees?

HATFIELD: With little pine trees.

MINK: Scrub pine?

HATFIELD: I'd call them a scrub pine the way I see them here.

MINK: How many towers did you erect up there?

HATFIELD: One tower. There's a picture of it somewhere.

MINK: During the two months that you were up there, how much of the time did you spend with putting in the chemicals? Day and night?

HATFIELD: Oh, night and day, yes, a continuation.

MINK: Did you trade off? Did Charley take the day shift and you take the night shift?

HATFIELD: No, how ever we felt. At different places, it was different times. That was all right; I didn't mind. I was young, you know. I didn't care. Nights suited me. I used to be out at night. But being out at night, you wouldn't know it was night, because it was so light. And people came along, you know, mostly prospectors. Lots of times we'd get water, you know. There was a spring nearby. I used to walk and get the water just a little ways down.

MINK: Then you'd sit and talk to them?

HATFIELD: Oh yes. Fellows would tell us their experiences, you know, and where they were going. We gave them a cup of coffee. They were all good fellows; they were from somewhere, you know.

MINK: Were most of them from the United States?

HATFIELD: Yes. Also, I saw some beautiful specimens of

gold--wonderful nuggets, big ones.

MINK: Before you went up to the dome from Dawson City, you signed the contract, and you were telling me that you hit the city. You got all cleaned up, and you went out to dinner.

HATFIELD: You mean in the evening?

MINK: Yes.

HATFIELD: They wanted to show us the town--their government officials. I forget that man's name. He took us all around the town and showed us everything.

MINK: When did you order the lumber for your tower?

HATFIELD: Right away.

MINK: Next day?

HATFIELD: Oh yes, right away quick--groceries and everything else, so everything was done fast. No use hanging around town.

MINK: Yes.

HATFIELD: Get going.

MINK: Were most of the people receptive to your rainmaking?

HATFIELD: Oh sure. We got some fine articles in the paper. Their newspaper was called the Yukon World. They were right on the front page. They were full-page articles.

MINK: Did you give those to the library?

HATFIELD: They got one, I think. I don't know if it's in that book or in the other book. They did some hydraulic

mining at Dawson.

MINK: After you finished the contract, then you came back by steamer?

HATFIELD: Well, we just tore everything down, of course-- the tower. I don't know what they ever did with that lumber. We left the lumber up there on top. Somebody got it. It didn't belong to us anyway. It belongs to the government. And there was an old roadhouse down about a block or so from where we operated, but it had been closed up. They called it the King Solomon's Dome Roadhouse. It had these terrible horns hanging out in the front. I can see it now, that old roadhouse, but it was locked up. Nobody was there. They probably couldn't make it and moved down to Dawson.

MINK: So you went back down the river?

HATFIELD: I think we stuck around there a couple days. There was a boat going to Whitehorse. We had to go up-- everything was up then. We had to shoot those rapids going down, then they poled us up the rapids in a couple of places. There were two places. That part was all right and it was a nice trip.

MINK: And then after you got back to Los Angeles, what was next on the agenda?

HATFIELD: Crows Landing.

MINK: Crows Landing again?

HATFIELD: In 1907.

MINK: Is this the first Crows Landing job, or was this the second one?

HATFIELD: No, 1905 was the first job there.

MINK: 1906?

HATFIELD: Well, you see, we started in November, and when I say 1907 that probably really means 1906-1907.

MINK: Well, when you got back up to Crows Landing, were there a lot of people interested to know what happened up in Dawson?

HATFIELD: Yes, sure. I'd tell everybody who came around about the trip, you know, and nobody had ever been up there in 1906. Of course, today, that's quite different.

TAPE NUMBER: I, SIDE TWO

MAY 8, 1969

HATFIELD: I just happened to think of something. It concerns that contract we had with a business friend in Los Angeles. On the way down from La Crescenta, going through Glendale, we stopped at the "old number one," the first store in Glendale. It was on Verdugo Road, right near Colorado Street. My brother says, "There's some Times newspapers outside in front;" so he jumped off the wagon and ran over there and picked up a Times. Well, he ran over with it and looked it over. There was a fine article in the Times about my brother. Some reporter had been down to Inglewood where we lived and had interviewed my mother. And they tried to find out where we were located so they could come up, you know, and interview us at the place of operation, but she didn't know where we were.

MINK: You hadn't told her?

HATFIELD: We didn't tell her; we just took off for the wide open spaces. It was wild back in those days. So that was pretty nice to have an article like that. It had my mother's picture on the front page sitting on the front porch. I think you have that in that folder.

MINK: We probably do. You were also telling me that at

one point, Charley went to school in South Pasadena.

HATFIELD: Yes, Charley went to school in South Pasadena. My folks used to live there, two or three blocks from the school which was on Mission Road.

MINK: How did that happen?

HATFIELD: It was right near the old Cawston Ostrich Farm. I used to run down there as a little boy and look at those ostriches. You'd throw them an orange and they'd swallow the whole orange down; you could see it going down.

MINK: How did it happen that you were living in South Pasadena?

HATFIELD: Well, my father liked that locality enough to sell our place over in Hollywood at Heliotrope Drive and Melrose. He had bought an acre of land there and then built a house on it. He lived there about three years and then sold it. He was a great man, you know, to build, sell, and make money on a house.

MINK: What was the extent of Charley's schooling? Did he graduate from high school?

HATFIELD: Well, not exactly, no; he went through grammar school.

MINK: Well grammar school then would be the eighth grade or ninth grade.

HATFIELD: Well, we always called it the ninth grade.

MINK: That was graduation?

HATFIELD: That was really going into high school then.

MINK: Then did he attend high school?

HATFIELD: Well, no. He just went through grammar school.

MINK: How about yourself?

HATFIELD: The same.

MINK: When he got through grammar school he'd be about fourteen?

HATFIELD: Oh, I don't know exactly, the correct age.

MINK: Well, how old were you when you got through school?

HATFIELD: I'd have to stop and figure. I went through the eighth grade--not the ninth.

MINK: And where did you graduate from the eighth grade?

HATFIELD: In Inglewood.

MINK: So when you were in South Pasadena, you didn't attend school there?

HATFIELD: Oh, yes.

MINK: You attended school in South Pasadena?

HATFIELD: Yes, I had just begun to go to school--first grade.

MINK: You moved over to South Pasadena from Hollywood, and then you moved over to Inglewood.

HATFIELD: That's right. That's when I was about seven.

MINK: Another thing you said was that in these initial experiments that you carried on in Inglewood. . .

HATFIELD: The first experiment that Charley carried on

was down on my father's ranch in San Diego County. It was in April of 1902. Now the second one was in May. He followed right up to obtain rain in each and every case. Then the next one was in June. He made them a little stronger and then he tried in July and he got the heaviest July rain ever recorded in San Diego County.

MINK: Is that right?

HATFIELD: Yes.

MINK: That would have been about 1903?

HATFIELD: That was in 1902. Then, you see, we went from there to Inglewood, and the next test was in Inglewood in September. And then in November, we went up into Big Tujunga Canyon.

MINK: Now I asked you this yesterday, Paul, and I'd like you to try to think about it. You told me that you asked Charley, "What are you doing?" And he told you. Now at that point did he tell you everything he was doing? In other words, what I'm asking you is, were you in on this from the very beginning?

HATFIELD: Well, after he'd tried a few tests, then I got together with him--well, like going up there in Big Tujunga Canyon. But he studied meteorology and chemistry these four years before he ever did any experiments.

MINK: How did he study it? Where did he study?

HATFIELD: Well, like I told you yesterday, he took up

various books, you see, like chemistry, and encyclopedias-- you know, the best scientific books he could get.

MINK: And he got these from the public library in San Diego?

HATFIELD: That's right.

MINK: I imagine that there'd be a record maybe, if they kept records back that far of what he did. Was there ever anything that was said later on in his career about his research at the San Diego Public Library? Did he ever talk to you about it?

HATFIELD: No.

MINK: He never talked to you about the books that he read?

HATFIELD: Oh, only books on meteorology. They were scarce.

MINK: At that time, I guess they were.

HATFIELD: There was one, not the one that I gave to the Los Angeles Library--that's by, I think, Elias Loomis, wasn't it?

MINK: That's A Treatise on Meteorology by Loomis, yes.

HATFIELD: Well, there's one that's issued by Columbia University. The writer's name was William Morris Davis. It was written something like in about 1893, I'd say. He was an expert on meteorology.

MINK: Charley put a big store in that book?

HATFIELD: Oh, yes; it was a wonderful work.

MINK: He was studying the movements of clouds?

HATFIELD: He was studying all kinds of things--humidity, temperature, and rainfall. Of course, you see, down in Southern California, it's dry country anyway, a dry place. This got him started to think and use his noodle about how to go about these different things. As I say, he studied it four years before he ever did any experiments.

MINK: Would you be able to say what years these were? Was it when he was, say, twelve, in there? Or was he younger than that?

HATFIELD: Well, he started in on the first experiment in 1902.

MINK: But before he even began experiments, when he was, you know, studying up and evolving this process and his idea of how to do it, how old was he then?

HATFIELD: Well, we can figure back. It'd probably be between 1898 and 1902. We lived in Pasadena at that time.

MINK: I see. Whereabouts in Pasadena did you live?

HATFIELD: Well, on Madison Avenue, right off of Colorado Street. My father had a whole acre there, imagine that.

MINK: Did he build a home there?

HATFIELD: Yes.

MINK: I see, and so then Charley could go to the Pasadena

Public Library?

HATFIELD: Oh, yes.

MINK: We can figure out how old he was then in 1898, that would be no problem.

HATFIELD: From 1875 to 1898 means he'd have been about twenty-three.

MINK: So all during the time that he was in his teens and in his early twenties, he was actually studying; I suppose he even went to the Los Angeles Public Library.

HATFIELD: Oh, any place where he could find books.

MINK: Did he send away for books?

HATFIELD: Not that I know of, no.

MINK: Did he have quite a library later on in his life? Did he start a collection? Did he start acquiring books at this point?

HATFIELD: You mean a library?

MINK: Of his own, yes.

HATFIELD: Yes, he had quite a few books.

MINK: In this period, when you were in Pasadena, what kind of work was he doing there? Was he working for the sewing machine company?

HATFIELD: Sewing machine company, yes.

MINK: When did he start working for them? How old do you think he would have been when he started?

HATFIELD: Oh, he started pretty young. You see, my father

was in it too.

MINK: Oh, I see.

HATFIELD: We used to take old heads and play around with them. We'd tear them apart and put them together again.

MINK: Sewing machine heads?

HATFIELD: Yes. I used to do the same thing.

MINK: They're pretty interesting, aren't they?

HATFIELD: Well, I liked to play with something mechanical, you know.

MINK: When was your father in this business?

HATFIELD: When Charley was born, he worked for Singer Manufacturing Company.

MINK: I see, back in New York?

HATFIELD: In Fort Scott, Kansas. I have a picture I'll show you, from the time that he was born.

MINK: It was later on that he gave up the sewing machine business and went into the building, sort of what you'd call real estate business?

HATFIELD: That's it--at Minneapolis.

MINK: He went to Minneapolis?

HATFIELD: Yes, he went to Minneapolis; but he built houses in California and Fort Scott, too.

MINK: Oh, he did building there?

HATFIELD: That's right; he didn't build them himself. He'd buy lots and hire a carpenter to build them.

MINK: Were there a lot of people doing this, Paul, at this time?

HATFIELD: No, I don't think so, no; it was a pretty good business.

MINK: He was just interested in making money?

HATFIELD: That's it. He had a big family, you know.

MINK: That's right, a lot of people to support.

HATFIELD: Sure, that's right. He'd travel around, sell one, move on, and pioneer.

MINK: What did your mother think about all this?

HATFIELD: She got kind of used to it. She didn't like it, I guess, at the start, from what I've heard, but after moving around and coming West, to San Diego and different places, Pasadena, Sierra Madre, a couple places up there, she got used to it.

MINK: In your family there were five children, right?

HATFIELD: Yes.

MINK: Who was closest to your mother?

HATFIELD: I guess I was.

MINK: You were the closest?

HATFIELD: Charley and myself.

MINK: I don't want to say you were the favorite ones, but. . .

HATFIELD: Well, no, not exactly, no.

MINK: And how about your father, who was he closest to?

HATFIELD: Oh, it was the same way.

MINK: Same way?

HATFIELD: Yes.

MINK: So they really sort of supported you in this.

HATFIELD: Oh, yes. Home-like boys, you know.

MINK: This is kind of contrary to an article that I read in the Fort Scott newspaper, which said that your father didn't approve of what you were doing.

HATFIELD: Well, that's some reporter.

MINK: Another reporter?

HATFIELD: Yes. That's what they do, you know; they get everything twisted.

MINK: Well, did you find in your experience with the reporters over the years that they try to exaggerate the stories and change them and make them more sensational?

HATFIELD: They do, yes. They make a lot of mistakes. I don't know if they make them on purpose or not, but there are errors made.

MINK: We've seen that already haven't we, in some of these articles here?

HATFIELD: The same thing occurs in book-form.

MINK: What do you mean in book-form, Paul?

HATFIELD: Well, that book--I suppose your library has it--This Fantastic City, San Diego that has a lot of errors. It was written by Shelley J. Higgins, the editor,

Shelley Higgins.

MINK: And then there's the history of San Diego that [Richard F.] Pourade wrote, too.*

HATFIELD: That's right.

MINK: Of course, the San Diego episode was a very sensational thing.

HATFIELD: Well, we filled it, and then the flood, and then they didn't pay him after all.

MINK: I know they didn't.

HATFIELD: Imagine that, now; they didn't even pay his expenses.

MINK: Weren't they sort of put off with him?

HATFIELD: Well, the damages they claim brought against the city were about \$850,000. If they paid Hatfield, then they would have to pay the damages. So therefore, by not paying us, you know--that's what they claim--they got out of the entire thing.

MINK: I don't know as we should be skipping around like this in getting to San Diego, but since we're talking about it, we might as well go ahead. I was reading in one article where it pointed out that you and your brother were really sort of, what you might like to say, personae non gratae. In other words, people were really out after

*Gold in the Sun (San Diego: The Union-Tribune Publishing Co., 1965).

your hide, and maybe if they could have caught you they would have tarred and feathered you.

HATFIELD: Oh, no.

MINK: No?

HATFIELD: No.

MINK: No?

HATFIELD: Oh, no. They wouldn't have done that.

MINK: Well, when you finished with the experiment down there, did you go back into town?

HATFIELD: Yes.

MINK: One of the articles points out that it was your idea to change your names and call yourselves the Benson brothers.

HATFIELD: Well, that was all right. We weren't fool enough to tell them we were the Hatfield boys, because we had to walk all the way down. It was sixty miles from where we were up there down to the city of San Diego.

MINK: Well, why didn't you want to tell them that you were the Hatfield boys?

HATFIELD: One night we came across--I forget that man's name, but he was standing over there across a creek. We had to get across to his side, and so we made it. We got over on that side, and we'd just come down from Morena. He said, "Did you see Hatfield up there?" We said, "Yes,

we saw Hatfield; he was up there." He wanted to know what our names were. So I told him, "Benson." Well, that was the best thing to do.

MINK: What did he say?

HATFIELD: It was getting darker, and we asked, "Can we stay around here this night." And this fellow thought the dam might go any minute. His house was down along the creek. But he had another house up on a hill. He said, "My wife and two kids are going to sleep up there tonight, if you boys want to stay, you can stay right here." So we slept in his home and in his bed. Imagine that. People were different in those days, you know. They could see we were all right, but he didn't know that the Hatfields ever slept in his bed. Imagine that.

MINK: Well, was he mad?

HATFIELD: They were nice people, and they gave us our breakfast the next morning.

MINK: What did he say about the Hatfields? Was he angry?

HATFIELD: Oh no. They were worried more about the dam breaking and sweeping them away.

MINK: What I'm trying to ask you, I guess, is if they weren't angry at you, why did you want to conceal your identity?

HATFIELD: Well, we thought it best to do that--at least, I thought it was the best thing to do.

MINK: Why did you think it was best?

HATFIELD: Well, to take no chances. They might tell somebody else.

MINK: They would be after you?

HATFIELD: Yes.

MINK: Well, you didn't realize how much damage had been done.

HATFIELD: Oh, we didn't know anything about it.

MINK: When did you first begin to notice it?

HATFIELD: We could see it on our way down.

MINK: What did you see?

HATFIELD: Everything was gone. The road was gone, and bridges were gone. There was another thing. During the time we were operating, before we started there was 110 bridges in San Diego County, and when we got through, there were only two left in the entire county. It took all the railroad and highway bridges--ripped them right out. There wasn't a train in San Diego for thirty-two days.

MINK: Tell me as much as you can about coming down from Morena.

HATFIELD: Oh, it twisted around here and there. Got there the best way we could, short-cuts, you know. It's a long ways when you are all tired out.

MINK: Were you walking on foot or were you on horseback?

HATFIELD: On foot!

MINK: No horses?

HATFIELD: No, no.

MINK: How had you got up there to begin with?

HATFIELD: You mean when we went to work?

MINK: Yes.

HATFIELD: It was dry, and we had a nice road.

MINK: Did you get up there by horse and wagon?

HATFIELD: Oh yes, and we hauled everything in.

MINK: Well, did you start back by horse and wagon?

HATFIELD: No, we walked down.

MINK: What did you do with the horses and wagon?

HATFIELD: Well, I see what you mean now. No, we had the lumber hauled in.

MINK: And how did you get in, walk?

HATFIELD: We rode right in with them. We were all right together.

MINK: What was it that made you decide to start walking back?

HATFIELD: You couldn't get anywhere if you didn't. That's the worst thing. Even riding a horse was bad enough. Deep gullies, you know.

MINK: Well, Charley wanted to stay there until he filled the reservoir, was that it? He agreed to fill the reservoir, right?

HATFIELD: He agreed, sure.

MINK: And so that's why he stayed until he filled it?

HATFIELD: That's right. They gave us one year to fill the thing. We started on the first of January [1916], and on the twenty-eighth she was goin' over the top. Eighteen billion gallons, that's what it held. Not only was it going over the top, but the next morning we stepped out and we could hear the roar of the water going below like Niagara Falls; and the water was going over there four feet deep. Enough water went over the top to fill it a second time. Imagine that. And that's been fifty-three years, and it's never been full since. Right today it's only a third full. But I don't know, it should be full now with all this rain.

MINK: Was that the Otay Reservoir?

HATFIELD: San Diego County is the driest county in the state.

MINK: Was that the Otay Reservoir?

HATFIELD: That was the Morena Reservoir.

MINK: Morena Reservoir?

HATFIELD: It was built by John D. Spreckels, the sugar king, and it laid there for nineteen years before the city got it; but it never was full. He thought he had a lemon and they thought it was a lemon, too, afterwards. And from that time on--about seventy-two years--it's only been full once. In all that time. It might be another seventy-two

years.

MINK: Well, since we started out with San Diego, let's go back to the beginning of the San Diego experiment and begin by answering this question. When did you first learn about the San Diego offer?

HATFIELD: The city council of San Diego sent my brother a telegram in December of 1915, asking him to come down and meet the city council, which he did.

MINK: Did you go?

HATFIELD: No. He did and that's where they formulated the contract to start the first day of January. I forget when it was, what date the contract was signed. I had that and mislaid it somewhere, the telegram. I kept that; it's still around somewhere. Well, I think it was around about December 15, 1915. So they formulated the contract to fill it in one year. So we did; we got busy; we lived in Eagle Rock at the time.

MINK: You lived with your father and mother?

HATFIELD: It was at 108--the number was, I think--Royal Drive, just off Colorado Blvd.

MINK: And so you went and you did your usual thing? You went to San Diego by train?

HATFIELD: Yes.

MINK: And then you ordered your lumber for the towers?

HATFIELD: That's right.

MINK: How many towers did you have at San Diego?

HATFIELD: One tower.

MINK: Where was it located in the area?

HATFIELD: Right near the dam. All you had to do was walk like from here to the gate.

MINK: What about your chemicals? Did you bring them from Los Angeles?

HATFIELD: Oh yes, sure.

MINK: For this particular experiment, were two trunks sufficient, as usual?

HATFIELD: I want to answer that question; Charley said to me, "Now listen, we've got a big job." That is a big job to fill a reservoir. Imagine that.

MINK: I know.

HATFIELD: It wasn't like an agricultural contract. It'd only require maybe three or four inches of rain, you know. He said, "I'm going to fill that reservoir, and give them the works." So he did. It was quick. From the time he started, the first couple of days, we didn't get any. Finally, about the third day, it started to rain and kept on up to the twenty-eighth, so it wasn't a full month at that, you see.

MINK: But you really had a year.

HATFIELD: A year to go, un-huh, a year to go. We filled it, really, in twenty-six days.

MINK: You really brought down more chemicals than you needed, didn't you?

HATFIELD: I see what you mean. We filled it up right over the top enough to fill it a second time. Gee, what a beautiful sight that was.

MINK: Well, before you left there, you know, to start back, did you bury the pans?

HATFIELD: Oh, sure. That was one of the main things, not only the pans, but a lot of other things: groceries and things--get rid of them. We took off, so all that remained was just the skeleton part of the tower. It's in one of these magazines. Somebody took a picture of it after me. I think it's in the Desert Magazine and it might be in Westways.

MINK: They took a picture? So it stayed there for a long time.

HATFIELD: It was not there for long; about a year later it was torn down. Nobody was up there. It was all open country, you know. Campo was the nearest town.

MINK: After you got down to San Diego, how long were you in town before you started up? About a week?

HATFIELD: Three or four days.

MINK: When you'd go to these towns, would you usually stay at the hotel? Or did you have friends in San Diego?

HATFIELD: Let's see, in San Diego, it was mostly at hotels.

You see, when you got to a strange place and didn't have any friends you'd go to hotels. We didn't stay long; we wanted to get going and go right out and go to work. We weren't there to play around. Like up in Alberta, Canada, in 1921.

MINK: You contracted to have the groceries and other supplies brought up?

HATFIELD: We knew we were going to be there for a month, three months, or four months. We had a bill of fare, or a list of groceries, and we'd fill it all out, give it to the groceryman, have him fill it, put it in boxes and order the lumber. Everything was taken up at once. There were two or three tents.

MINK: Did you buy those tents?

HATFIELD: No, usually we'd rent them.

MINK: How long did it take you to get from San Diego up to the reservoir? Do you remember?

HATFIELD: You mean going up?

MINK: Yes.

HATFIELD: Oh, I don't know, it was sixty miles. It was quite a good road all the way--that is, going, not coming back.

MINK: There was you and there was Charley and the man that was hauling the stuff, right?

HATFIELD: Yes.

MINK: When you got there, he unloaded the wagon and you helped him and he just turned around and went back?

HATFIELD: I got busy and I don't know if we paid him or not or how it was; I've forgotten. You know, when you hire somebody. We probably paid him before we started, and maybe I paid him when we got there. I can't remember every little detail.

MINK: Oh, of course not, I don't expect you to.

HATFIELD: No, that's right.

MINK: But I would like to get a kind of an idea of how much these things cost you. For example, how much on a contract did you figure that you would have to lay out?

HATFIELD: Well, that's it--considerable.

MINK: Can you tell me by items? For lumber, how much would you expect to have to lay out?

HATFIELD: Lumber didn't mean anything. I'm not sure; it cost something like say, fifty dollars. We did our own work. Labor was higher than what the lumber would be if you hired it done.

MINK: And for your pans?

HATFIELD: No, they were trays. They weren't very much. I don't know in those days. Of course, things were much cheaper. I'd say they were five dollars a piece.

MINK: You had about eight of those?

HATFIELD: I think it was ten.

MINK: That'd be about fifty dollars, too, for those. And for your groceries, how did that come out?

HATFIELD: They don't amount to anything, you know; even delivered everything was cheap. Of course, we were operating in the day.

MINK: I know that during the time that you were on the contracts that you and Charley took turns, you know, tending to the chemicals; but what did you do, besides sleeping and eating to pass the time?

HATFIELD: Well, we used to play checkers; we were great checker players. He loved checkers. Once in a while we played cards; but checkers was our main game--and horseshoes! We'd go outside and pitch horseshoes; good exercise.

MINK: Any reading at all?

HATFIELD: Oh sure!

MINK: What kind of reading did you do, Paul?

HATFIELD: Same thing.

MINK: You read the meteorology books, too?

HATFIELD: Yes.

MINK: And then you would discuss them with Charley?

HATFIELD: Oh yes.

MINK: Did Charley have a barometer that he took along with him when he went?

HATFIELD: Yes. We had all those instruments.

MINK: A barometer?

HATFIELD: A barometer is a nice thing that indicates a change in the weather, you know, low and high pressure-- and a thermometer.

MINK: You took a thermometer?

HATFIELD: Hygrometer. A rain gauge.

MINK: Were these things that he kept and always took back with him from every contract? He didn't buy a new one every time?

HATFIELD: Well, of course, he'd take care of them. They'll last forever.

MINK: Did you bring them back from San Diego when you left there?

HATFIELD: Yes. It was just one barometer. [tape pause]

MINK: When you got to San Diego from Morena, what did you do then?

HATFIELD: We went over to a friend of ours, a fellow by the name of Binney. You saw a picture of him last night, I think. We kind of shined up, shaved up, you know, and then went over to the city council.

MINK: Yes.

HATFIELD: Well, there was the drawback, right there. We thought we were going to collect. Then they began harping to the city attorney about the damages that had been brought and all this and that, you know. We saw at once

that we were licked.

MINK: So what did you do then?

HATFIELD: This city attorney didn't do right when you come right down to it, you know. Well, we guess maybe he was just a little bit leery that the individuals that lost would bring suit against the city.

MINK: If you were paid.

HATFIELD: But not that I know of. They claim that they did it, but I don't know how true that was.

MINK: How did Charley feel?

HATFIELD: Charley, of course, was very indignant and he thought maybe he could collect it. So he interviewed--I forget just who it was--a couple of attorneys. He wanted to know if he could collect; but nothing doing. We designed the whole works and they got a million dollars' worth of water for nothing.

MINK: How long did you stay in San Diego after you got back there? A couple of days?

HATFIELD: We waited a day or so, then we took the boat and went up; that's the only way you could get out. You couldn't go by train; it would take two or three days. Everybody had to go by boat.

MINK: You went up to San Pedro?

HATFIELD: Yes.

MINK: And at this point, your family was living in Eagle

Rock?

HATFIELD: Eagle Rock, yes.

MINK: So you went back to where?

HATFIELD: I went back home.

MINK: Do you remember returning home? Well, what did your father say and what did your mother say? They had heard about this, I'm sure.

HATFIELD: Oh yes. The Los Angeles Times had all kinds of articles, you know.

MINK: What did they ask you?

HATFIELD: The Examiner, too. Well, I think the folks took the Times at that time. They didn't like it, because they figured themselves, how could he collect? Do you see? Then we explained to them about the damages and that the Otay Dam went out, you know. That was the other dam. And the Japs had the gardens down below, you know. The city warned them to get out of there, that the thing was going to go out. They didn't though. I think there were eighteen of them that lost their lives. The thing went out at once, just opened up and went right out.

MINK: Well, did your father offer to try and help you.

HATFIELD: He couldn't help.

MINK: So this would have been about early 1916. Was this about the time that you went into the service?

HATFIELD: 1916?

MINK: Yes.

HATFIELD: Oh no. That was later.

MINK: What happened after San Diego then? What did you do?

HATFIELD: There were a lot of contracts before that.

MINK: Well, we'll talk about those. What did you do after it became apparent that you couldn't collect from the San Diego council, and you were back home? What was the next thing you did?

HATFIELD: Right after that, we didn't do any contracts until 1917.

MINK: Do you think that this was due to the bad publicity that you got in San Diego?

HATFIELD: No. I don't think so. What most people want is rain, especially in agricultural areas.

MINK: Wasn't it about this time that quite a bit of rain was falling anyway in Southern California? Oh, that was 1918, I guess, when the big floods came.

HATFIELD: 1918?

MINK: They had the big floods in Los Angeles County.

HATFIELD: I don't think so, no. The year 1918 was pretty dry. In 1917 we signed a contract with a man by the name of Jameson.

MINK: Jameson?

HATFIELD: We operated near Taft, California. He lived near

Grapevine. You know where Grapevine, California, is?

MINK: Sure.

HATFIELD: He had about fifteen hundred acres east of Grapevine on that flat. He owns pretty near the entire town of Tehachapi. He owns that big Monolith mine up there, and he owns all the town of Taft; he's a millionaire. He owned about six or eight oil wells. So he hired us, and we went up there and operated on Buena Vista Lake. That was east of Taft, a good-sized lake. And that was in January and February, and I think we left on the fifteenth of March. It was all wheat on the flats there. So we won that contract. That was for Jameson.

MINK: How much were you charging him, a thousand an inch?

HATFIELD: It seems to me it was fifteen hundred.

MINK: Fifteen hundred an inch?

HATFIELD: Yes.

MINK: How much rain did you give him?

HATFIELD: Two and a half inches.

MINK: In the course of January?

HATFIELD: Oh, in about two and a half months.

MINK: In this case, where did you operate out of? What was your base for getting your lumber and other supplies?

HATFIELD: Oh, we bought the lumber in Taft; everything came from Taft. It was just five miles to Taft from where we were at the lake.

MINK: Right. And how did you get up there? Did you go up by train?

HATFIELD: We went by train up to Taft.

MINK: Let's see, would that be the Southern Pacific?

HATFIELD: We went to Bakersfield and then out, you know.

MINK: You went up on the Santa Fe or the Southern Pacific?

HATFIELD: Well, they both go through Bakersfield.

MINK: You went to Bakersfield and then from there you went on over to Taft?

HATFIELD: That's it. Jameson had a big truck there.

MINK: What kind of a guy was he--nice guy?

HATFIELD: Oh, fine, fine.

MINK: Did the people around cooperate?

HATFIELD: He used to come over every few days and visit us.

MINK: To see how you were doing?

HATFIELD: Yes.

MINK: Was he well liked by the people around the area?

HATFIELD: Oh sure, a good fella. He was always giving money away to charitable institutions.

MINK: Well, now, you know, Paul, during this period that you were operating in the San Joaquin Valley--Bakersfield, Taft, Tulare, up in that area there--wasn't this a time when there was the big Mussel Slough controversy, you know, between the farmers and the railroad? There was a great

deal of opposition to the high rates that the Southern Pacific was charging the farmers there for the hauling of their wheat to market in San Francisco.

HATFIELD: It seems to me that there was something said about that. But I don't know what year that was.

MINK: Do you remember anything about that?

HATFIELD: I don't know about that, but that, of course, has nothing to do with rain.

MINK: What was your usual kind of a procedure here? Would a bunch of the farmers get together and make up a purse for you?

HATFIELD: Yes, and they'd sign, sign up.

MINK: Then there would be one spokesman for them?

HATFIELD: That's right.

MINK: In this case Jameson was the spokesman, right?

HATFIELD: Well, he was the only signer.

MINK: He was the only signer?

HATFIELD: He paid the whole works. I guess he did, unless someone went in with him that I didn't know. But he was a millionaire and it didn't mean anything to him. And he had a dandy; he got about ten sacks of wheat an acre.

MINK: He got about ten sacks an acre that year?

HATFIELD: Yes, for all fifteen hundred acres.

MINK: Did he ever call you back?

HATFIELD: No, we didn't go back, because some way or other

we lost track of him. If we had really tried we could have gone back.

MINK: Well, did your brother try for contracts or did they just come to him?

HATFIELD: No, a lot of them sent representatives down, like from Canada. After the Crows Landing job, we'd go back; we got acquainted and they'd ask us to come back next year and year after year. We got others up and down the valley. We got letters by the hundreds.

MINK: What'd you do with all those letters?

HATFIELD: I've got a lot of them yet. Didn't I give you some?

MINK: You gave some to the Library. [tape pause]

MINK: We're talking here about an article.

HATFIELD: Well, what's the man's name?

MINK: It's by a Jack E. Branstetter. He's the man that wrote the article. You say that he interviewed you, Paul?

HATFIELD: He interviewed me in Pearblossom. Charles Darr, a friend, told him of me. Now we are friends. Some guys will ring up, make an appointment, and they'd write an article. I've had them come here, you know.

MINK: You've had people come here to talk to you?

HATFIELD: Some, sure; others ring up, then I get letters from all over the country.

MINK: What are they asking you, Paul?

MINK: You don't have to answer this if you don't want to.

HATFIELD: No, I know.

MINK: Was he paid some money for it?

HATFIELD: He wasn't paid anything.

MINK: He wasn't paid anything at all?

HATFIELD: No. Not that I know of. I don't think so.

MINK: Did people come from the studio or writers come to talk to him about getting together a script for the movie?

HATFIELD: Well, you're talking about The Rainmaker. Oh well, that's different. I've got that; I'll go and get a copy of it. [tape off]

MINK: We're referring here to a script of a movie produced by Pasadena Films Incorporated, revised August 30, 1956, third draft, production number 9585, called Hatfield, The Rainmaker. And we notice here that the script itself is by Donald S. Sanford.

HATFIELD: That's right.

MINK: And apparently it has an autographed title page from him to Charley Hatfield.

HATFIELD: Yes.

MINK: "With warmest regards to a very great gentleman, Donald S. Sanford." Now, Paul, you tell me that you saw this movie.

HATFIELD: Oh, it was wonderful.

MINK: You liked the movie?

HATFIELD: It was very well acted out, from all sides.

MINK: And you thought it was pretty true?

HATFIELD: Oh yes.

MINK: It's mainly the story about San Diego, is that right?

HATFIELD: Yes, that's what it was.

MINK: About the flood in San Diego?

HATFIELD: About the city council and all that.

MINK: Right, and you say Charley interviewed with Mr. Sanford and gave him the information for this. That's pretty interesting. Was it a commercial film?

HATFIELD: I forget who sponsored it, but it went all over and I got it on the television.

MINK: You've seen it on the television?

HATFIELD: Oh sure.

MINK: Well, that's very interesting. But actually, there was, as you know, another film called The Rainmaker, which was a full-length feature film.

HATFIELD: They showed that all over the United States.

MINK: Right.

HATFIELD: Everywhere. It was a big hit before it ever came out here, in New York and Chicago. We knew it was coming, you know.

MINK: Was Charley involved? Was he interviewed for information on this?

HATFIELD: Charley was not much on that kind of stuff, you

know. Everything's rain. He wants to get out and do something.

MINK: Yes.

HATFIELD: Let somebody else; it's an advertisement. He got advertisement enough. Anywhere you'd go, I don't care if it was for groceries: "My son, what's your name?" We'd say, "Hatfield." They'd say, "You connected with the rainmaker?"

MINK: Yes.

HATFIELD: It's always been that way; it's still that way. Right here around this area everybody knows me. I've been here so long, you know. Anybody that comes along, "Where does Hatfield live?" It's the same way all over, even if I go down to Arizona or New Mexico. I've had fellas test it out.

MINK: Have you ever thought of producing a little rain here?

HATFIELD: Right here?

MINK: Yes.

HATFIELD: Oh, this is a good place.

MINK: You don't have any water around here.

HATFIELD: Oh, I'd use mountains.

MINK: What?

HATFIELD: They've got a big reservoir out back there--the Little Rock Reservoir.

MINK: Have you ever thought about producing some rain?

HATFIELD: Oh yes. I was going to tell you about that later. I got that all figured out. [tape pause]

MINK: The gauges?

HATFIELD: Yes; suppose there was a contract. Well, Mr. So-and-so here for ten or fifteen miles, we'll take his gauge and we'll take Hatfield's here and Mr. So-and-so's over there, some rancher, with his gauge--somebody that's got one you know. Not many have rain gauges. Take about four, and then strike the average of what falls. But that's another thing, we're always getting the normal. That's what would have fallen during that period. There's another main thing. It isn't the idea of going in there and produce rain but we always give them what naturally falls--probably wouldn't even have got that.

MINK: Because it was a dry year.

HATFIELD: But they might have got it. Probably wouldn't any year. And then we would get paid so much an inch over the normal, you see--so much an inch, up to one, two, three, four inches, whatever. That's an agriculture contract.

MINK: Oh, yes, this is dated June 6, 1906.

HATFIELD: We made it right that very day we arrived.

MINK: Dawson, Yukon Territory. This is from Charley. It's addressed to Mr. Rutgo. This is the man that you were telling me about yesterday.

HATFIELD: Yes. We met him down here.

MINK: "J. T. Rutgo, Esq., Acting Commissioner of the Yukon Territory, Dawson. Dear Sir: In accordance with the contracted agreement regarding the increase of the rainfall in the Yukon Territory, and particularly with regard to Section 2, I hereby nominate the following three gentlemen as members of the board: N. H. Norwood, O. R. Brenner and Vincent White. Your obedient servant, Charles M. Hatfield." Now what board was he talking about, Paul?

HATFIELD: Well, the board in regards to rain gauges.

MINK: I see.

HATFIELD: Now if I had a list of those gauges on these different creeks, you know, like Sulphur and Bonanza and Hunker. I've thought of them, all but one [Gold Run]; I tried to think of it last night.

MINK: Well, we probably could look at a map.

HATFIELD: We looked at a map.

MINK: You did?

HATFIELD: Yes. There was the Klondike River; that flows down between this dome and the city of Dawson. The Klondike River comes out there and flows into the Yukon River. That's a good-sized stream, too.

MINK: Well, then, these three people that Charley nominated were sort of like referees, is that right?

HATFIELD: That's it, right.

MINK: Or umpires?

HATFIELD: To kind of see the thing, yes. They were all good fellows, too. They were always fair.

MINK: What would they do? Would they take these three readings and put them together and divide them by three, or whatever it is, and this would be the average rainfall?

HATFIELD: It's like this: suppose we guaranteed (I forget what it was) a couple of inches. I guess it doesn't take much though up there; it soaks right in like a sponge because of the moss, you know. Then it dribbles down and goes right down and feeds the creeks. Oh, it was wonderful.

MINK: Well, what about up there then?

HATFIELD: Well, you can strike an average with three gauges. If it falls below average, you lose. It's so much, you know, like you guaranteed two inches, say. Well, suppose in one place, we only got an inch, the other one only got a half an inch, and the other one got maybe half an inch, a little longer we'll make it, you see; but we might have five inches in one place, and in the other place, maybe ten. It has to be something like that. We're not going to beat anybody, and we like it honest. That's why we always guarantee a certain amount. The worst part of it is, filling reservoirs.

MINK: Well, that was the question I was going to ask you

about the Morena Reservoir. Remember I asked you before lunch if you took an extra supply of chemicals along to San Diego?

HATFIELD: You betcha!

MINK: And you said you were glad I asked you the question. In connection with that I noted here in the article that we were discussing before lunch, the one by Jack E. Branstetter, that there was a statement in here that Charley had said to the mayor that, "Eighteen billion gallons is a lot of water. I wanted to make sure that I completed my job in the specified time, so I got ambitious, and I got carried away by the thought of what success would mean later." So that he simply overloaded the atmosphere. Well, was it Charley's intention to really shovel a lot of chemicals into the trays?

HATFIELD: Sure.

MINK: Was this to be sure he could get done by the specified time?

HATFIELD: He had to. No gauges. We didn't need any gauges. The idea was that they give us a year to fill Morena. One year is a long time, even that looked small. We had all summer when it doesn't rain at all. The only rainy months we got, you might say, well, would be November, December, January, February, and March.

MINK: So you really only had three months there.

HATFIELD: Three good ones.

MINK: And maybe April and May, a little?

HATFIELD: Yes, but the really funny part of it was, you see, he signed the contract in December; but we couldn't start until the first of January, so we lost December.

MINK: Because of getting down there and getting your things set up?

HATFIELD: No, they didn't call him until December--the telegram I told you about. And then he had to go and meet the council. Before he got it ready, it was the first of the month. But we'd already lost November and December. So if we'd have had to take that on in the summer, you see, it wouldn't have been so good.

MINK: I sort of envisioned that the principle that Charley worked on is kind of like a pump, you know? You know how a pump is dry and to prime it, you pour some water in it.

HATFIELD: Yes, prime it.

MINK: If you have your storms coming into the area and you're by water and then by sort of priming the cloud, you can make more rain fall in that area. So it has to be done when there is a possibility of precipitation occurring, you know?

HATFIELD: That's a pretty good illustration. That's right.

MINK: Of course, in San Diego, it's even drier than Los Angeles County.

HATFIELD: Driest county in the state. Well, outside of Imperial, but we don't count that. And that used to be San Diego County. They cut it in two.

MINK: What else do you have there?

HATFIELD: Let me show you. There is the depot at Crows Landing in the San Joaquin Valley.

MINK: It was taken in 1908.

HATFIELD: There is the town. There's a letter my brother wrote--the letter's out--from Honduras to my mother.

MINK: Oh yes. This is just the envelope.

HATFIELD: There's the stamp.

MINK: That's dated May 30, 1930. She was still living then.

HATFIELD: Oh yes; she passed away in 1938.

MINK: Now this is a picture of Charles Hatfield in the laboratory. Is this his laboratory?

HATFIELD: Yes.

MINK: Was it a workshop?

HATFIELD: Yes, a workshop.

MINK: And where was this located, Paul?

HATFIELD: It was in Montrose.

MINK: In Montrose? I see. And what is he doing here? Was he mixing chemicals?

HATFIELD: I didn't take that picture. I knew the fellow who took it; but he just kind of wanted to get a picture of him, so he pulled his coat off.

MINK: Oh he was sort of just posing?

HATFIELD: That's right.

MINK: Yes. This is one from Wasco, Oregon, dated July 29, 1907.

HATFIELD: We were up there three summers.

MINK: I think there are quite a few clippings.

HATFIELD: That's agriculture all over the country.

MINK: I'd like you to talk about Oregon, too.

HATFIELD: That's fine.

MINK: And it's "To Charles M. Hatfield: We, the committee, who entered into the agreement with Charles M. Hatfield for the purpose of testing his system of attracting and precipitating rain by artificial forces, wish to state that during the time his work was in operation from May 28 to July 25 of 1907, this county received rainfall far surpassing its normal, and as a result of this increased precipitation, Sherman County will harvest one of the finest yields of grain that she has ever produced in history." This is signed by John Fulton and C. F. Fulton and W. H. Biggs and Henry Richelderfer and George N. Canfield. I'm not sure what that last one is. That's very interesting, Paul.

HATFIELD: That was in 1907, 1908, and 1909. That was done during three summers. I was up there with him.

MINK: This is what, Paul?

HATFIELD: This is up in the Yukon when that Mr. Gibbs come along in a buggy and the Northwest Mounted Police were on horseback. He sluiced \$50,000 worth of gold; well, there it is. Can you make it out?

MINK: Yes, I can. I can indeed.

HATFIELD: I guess I took the picture.

MINK: Yes, I can. I see the horse and Gibbs' wife and the commissioner, I guess.

HATFIELD: And the sack of gold was supposed to be laying right down there on the ground.

MINK: Yes, but it's a little faded.

HATFIELD: I know; it's been handled by a horde of people.

MINK: Yes; we ought to try to get it reproduced before it fades anymore.

HATFIELD: There's the house Charley was born in. I don't know if you have that or not.

MINK: This is located in where?

HATFIELD: Fort Scott, Kansas. It's on the back there; I think you can make it out. [tape pause]

MINK: Now we're putting it back on to go on with the scrapbook.

HATFIELD: That's the Esperanza Sanitarium?

deal of opposition to the high rates that the Southern Pacific was charging the farmers there for the hauling of their wheat to market in San Francisco.

HATFIELD: It seems to me that there was something said about that. But I don't know what year that was.

MINK: Do you remember anything about that?

HATFIELD: I don't know about that, but that, of course, has nothing to do with rain.

MINK: What was your usual kind of a procedure here? Would a bunch of the farmers get together and make up a purse for you?

HATFIELD: Yes, and they'd sign, sign up.

MINK: Then there would be one spokesman for them?

HATFIELD: That's right.

MINK: In this case Jameson was the spokesman, right?

HATFIELD: Well, he was the only signer.

MINK: He was the only signer?

HATFIELD: He paid the whole works. I guess he did, unless someone went in with him that I didn't know. But he was a millionaire and it didn't mean anything to him. And he had a dandy; he got about ten sacks of wheat an acre.

MINK: He got about ten sacks an acre that year?

HATFIELD: Yes, for all fifteen hundred acres.

MINK: Did he ever call you back?

HATFIELD: No, we didn't go back, because some way or other

MINK: Oh this is the contract. . .

HATFIELD: Yes, that's 1905.

MINK: This is where you carry on a 1905 contract.

HATFIELD: We were right there in back of that place.

MINK: And this is the house in Fort Scott, Kansas, where Charles was born.

HATFIELD: That other one is of Crows Landing--see the depot surrounded by water?

MINK: Yes.

HATFIELD: There was some fellow that happened to be a good cartoonist, and he drew that. At that time, it was the new one.

MINK: Was it in the paper?

HATFIELD: I don't think so. I don't think it was ever published. That's 1907.

MINK: And they took a picture of it?

HATFIELD: Isn't it funny?

MINK: Yes, it sure is.

HATFIELD: That was surrounded with water, right in town; came down out of Orestimba Creek and the Coast Range. That was the year they released us. The ground was so wet that they released us. That was the second year we was there.

MINK: Oh, yes. Where was this photograph taken?

HATFIELD: That was taken at Crows Landing.

MINK: This is the station at Crows Landing?
HATFIELD: Yes.
MINK: Is this the first?
HATFIELD: No. This is the second.
MINK: The subsequent year?
HATFIELD: No, it was the third year.
MINK: It would be 1909?
HATFIELD: Third year, 1909.
MINK: "Compliments of Charles M. Hatfield." It shows the station.
HATFIELD: Now this makes you feel at home.
MINK: Yes.
HATFIELD: You're across the street here. See the hay? Look at Melrose Avenue. Heliotrope Drive goes right here, see? It goes right across there.
MINK: There's the windmill?
HATFIELD: Well, the drugstore's there now. Have you ever been in that drugstore?
MINK: Yes. I think I have.
HATFIELD: There were stores in front. Next time you go over there see if that house is still standing.
MINK: Yes. I will. Then this windmill that's shown here?
HATFIELD: That's gone.
MINK: Is that where Charles carried on his experiments?

HATFIELD: Not here.

MINK: Not here; this was in Inglewood then?

HATFIELD: That was San Diego County.

MINK: I was wondering, does that ranch in San Diego County show the windmill?

HATFIELD: No, no it doesn't. Now there's that picture my mother made. It took her twenty years. I've got the original.

MINK: Isn't that something. Well this shows you that your mother had certain artistic bents. This is what you'd call a medley and it is made entirely, you say, of newspaper clippings?

HATFIELD: No, from magazines.

MINK: Magazines?

HATFIELD: They are good--not newspapers so much--but nice magazine pictures.

MINK: There are scenes from pioneer times and from classical times; it's very interesting.

HATFIELD: Now here are a couple of articles. That's Mount Lowe back of Pasadena in 1904 and 1905. That's around the Esperanza Sanitarium. Now here's Mount Lowe up here, and they used to look down on us. They used to throw the searchlight down on us every night. Tourists used to go up there, you know, and they'd say, "Let's look up the rainmaker," so they'd throw the searchlight down

on the rainmaker. We'd stand out there and wave back at them and then they'd wave their flashlights.

MINK: [Laughter] I remembered about that.

HATFIELD: At the observatory.

MINK: Up at the observatory at Mount Lowe.

HATFIELD: At Mount Lowe. All right, at Mount Lowe there was an observatory there, and the astronomer was this man Larkin. And he wrote fine articles for the Los Angeles Times.

MINK: Edgar Lucien Larkin, yes.

HATFIELD: There are a couple of articles and there's a picture of him. I just wanted you to see.

MINK: I see, do either of these articles mention you?

HATFIELD: No, no.

MINK: Did he ever write any articles that mentioned you?

HATFIELD: Not that I know of. He was a great friend of Charley's.

MINK: How did Charley get acquainted with him?

HATFIELD: He saw him quite often. We used to go up there quite often.

MINK: Just to look the place over?

HATFIELD: To talk to him for a short time in the evening, or on Sunday to kill time.

MINK: Was Mr. Larkin interested in your brother's experiments?

HATFIELD: Oh, he was quite a man. He was interested in astronomy and astrology and everything. Do you know much about astrology?

MINK: Not much, no.

HATFIELD: I don't. A little, you know, everybody does.

MINK: Well, these are most interesting. There's one other question I wanted to come back to on the San Diego contract. Here again in the Branstetter article, it says here that, "For the first time in his young life Charles Hatfield felt a failure." (He was talking about after the San Diego contract.) "Even the stack of letters containing offers from all over the country did little to assuage or console him. Not until he opened one from a group of Coalinga ranchers, offering \$8,000 to end their drought, did he realize that he was not completely defeated." You were telling me before lunch that after the San Diego contract, you didn't do any more contracts for at least a year.

HATFIELD: Yes.

MINK: Was Charley really depressed during this year?

HATFIELD: No.

MINK: Well then, you wouldn't say that this was a correct view of how he felt?

HATFIELD: Well, that was a reporter.

MINK: He didn't tell you he felt upset?

HATFIELD: No. We were always together. Our Jameson contract was the next one.

MINK: But during this year when you didn't have any contracts, he didn't feel, perhaps, depressed, because of what had happened in San Diego?

HATFIELD: No. It was just about a year there, about eleven months, something like that.

MINK: What did he do? Did he go back to work for the sewing machine company?

HATFIELD: Oh yes. Charley was good. I'll tell you why he was good; he wasn't a high-pressure salesman. Well, you know, he was like I am, more easy going. You know, if you've got something to sell it's all what you're going to sell. Of course you couldn't do that today. Sewing machines everywhere--everybody has them now. But in those days, when a woman didn't have a machine or had some old broken-down one, maybe she wanted to trade it in. It was easy enough. Well, we'd make around ten dollars on sewing machines. If we sold a couple a week, that's twenty dollars; that was a lot of money in those days. Today you'd have to sell five or six.

MINK: Now during this time that Charley wasn't working on contracts, when he was selling sewing machines, did you go along and work on that with him? Or did you have your other work that you did?

HATFIELD: No. I'd do something else.

MINK: What did you usually do?

HATFIELD: Oh, anything, anything! I'm not afraid of work. You can see that right here. A lot of work here. I've been here sixteen years next month, and I never hired anybody. I grubbed this all. It was sagebrush when I came here. I grubbed the native growth all off. It's only been maybe five years that the park came out here. They spent a half million dollars here; oh, nice building up there, swell. [tape pause]

MINK: Let's talk for a minute about this Oregon contract, which would be about what, 1910? Or was it 1911?

HATFIELD: That was 1907, 1908, and 1909--in the summer-time. That's an agricultural contract.

MINK: In Sherman County?

HATFIELD: Sherman County, that's right.

MINK: To supply six inches of rain?

HATFIELD: No!

MINK: This is what the article pointed out.

HATFIELD: I see.

MINK: How much rain did you really guarantee?

HATFIELD: Two inches. It was two inches of rain and an average rainfall struck off by three gauges. This was the first year, 1907, and as near as I can remember, it was 2.55. That was the average. So after that contract,

they hired us back for the next year, 1908, same people. And I don't know what that says--that was 1907--remember the recommendation?

MINK: Oh, yes. I read that recommendation into the recorder. It's dated 1907, at Wasco, Oregon.

HATFIELD: They got bumper crops.

MINK: You say normal rainfall was 2.50, then you were to make 4.50 inches of rain, two inches above the normal?

HATFIELD: That's it; now you're talking. That was for July.

MINK: I think the contract ran from May 28 to July 25.

HATFIELD: Yes.

MINK: This is dated July 29.

HATFIELD: That was for a couple months.

MINK: The testimonial is dated July 29. That would be right.

HATFIELD: That's right.

MINK: Anything peculiar you remember about that particular contract?

HATFIELD: Oh nothing--no--it was just like any other contract. And the next one was the same thing over again. And the next one. All three of them. And they got big bumper crops, more wheat clear over to Baker, east of us. You know where Baker is?

MINK: Baker is generally a pretty dry area.

HATFIELD: The further east the drier it gets.

MINK: Eastern Oregon.

HATFIELD: Sure. There are the mountains just like it is here. It might be a little bit wetter than it would be ten miles north of here, we'll say.

MINK: How did you go up there? By train?

HATFIELD: Oh yes, we'd take the Southern Pacific to Portland and go inland to Biggs. He's the one that signed us. He's the one the town's named after. Then we'd go from Biggs east to Sherman County.

MINK: All of this was by train at this point?

HATFIELD: There was a little narrow-gauge railroad that ran in there.

MINK: I see, and then where did you purchase your supplies for this?

HATFIELD: At a little town called Sherman and a town called Wasco, pretty close together.

MINK: You'd get your supplies there?

HATFIELD: Yes, and anything you'd want.

MINK: And where did you set up there, to be near water?

HATFIELD: Well, that's another question. There're no mountains in that country; they're all low-lying hills, like the little hills back here.

MINK: I've been through that country.

HATFIELD: Just desert country, that's all.

MINK: Yes.

HATFIELD: But they have wonderful soil there. You can kick it and everywhere you kick, it flies, just like powder, almost. But with a little moisture, stuff will grow wonderful. It's great wheat country.

MINK: I think a lot of it is volcanic soil.

HATFIELD: I think so, because I know over by the Deschutes River--I walked down there, not far from this place--I found some petrified wood down through that section, willow.

MINK: So you had to be near water?

HATFIELD: Oh yes. We had water. Down a little kind of a draw through these hills there was a spring. And so we made our camp right there by that spring. I've got pictures of it.

MINK: How much of a body of water was there?

HATFIELD: Oh, not big--about as big as these two rooms--where the water ran out. It wasn't deep, probably about like that.

MINK: But that was sufficient?

HATFIELD: It doesn't have to be deep. Just so it's got water.

MINK: I see.

HATFIELD: Now up there in Alberta, Canada, in 1921, we

signed a contract with those fellows, that committee. It was the United Grain Growers Association. There were eight thousand members. The way they figured it out, each member put in a dollar. It didn't make any difference if they had one acre or a thousand acres of wheat. Some of them had a thousand. That whole country as far as you can see is just nothing but wheat--along the Canadian Pacific Railway there was plenty of it. So we went to work about May and June and July up to, I think, about the fifteenth of August. And we had these same gauges out again--three gauges scattered out, probably twenty miles apart. So we took an average. That wheat was wonderful through there, wheat clear out to Saskatchewan; it wasn't far from the Saskatchewan line. Charley took a ride. They said, "We want you to see this, it's so wonderful." So a couple of the committeemen came over one day and they took Charley clear out to Moose Jaw. When Charley came back, he said, "Well, it's wonderful the amount of wheat, literally tons of it." Great wheat country.

MINK: Well, you must have set up by a body of water?

HATFIELD: We set up by a big lake a mile across.

MINK: What was the name of the lake?

HATFIELD: Chafee's Lake, twenty-two miles out of Medicine Hat.

MINK: Is that sort of up on a rise?

HATFIELD: Where the lake is kind of in a little sunken valley, but not much. They have the rolling hills, but they're not very high, maybe a hundred feet, something like that, little raises, here and there. That's all desert country.

MINK: Did you have many visitors at that site?

HATFIELD: Oh, yes, they come from miles in all directions, everywhere. And at that time there was an awful lot of Russians. They came into that country to settle that section up. There were fellows with whiskers and women with shawls on their heads, and three or four kids, and some of them couldn't talk English.

MINK: They just came to look at you?

HATFIELD: Just to look and see.

MINK: What you were doing?

HATFIELD: Well, you would be the same way. They're the same; they're good people. The point is, we were sort of a curiosity.

MINK: That contract was in 1921?

HATFIELD: Yes. [tape pause]

MINK: You had a short ten-day contract for the Yuba County Reservoir.

HATFIELD: Ten days is what I thought it was. I don't have the date. The people of Grass Valley get their water from

the South Yuba Water Company, at Lake Spaulding just a few miles from Emigrant Gap in Nevada County.

MINK: Yes.

HATFIELD: Now these fellows signed a contract for five hundred dollars, I think it was. And we went to work. (I have to study on that.) We went to work, anyway. We had to put up our towers. There was a lumber mill there and we got all our lumber at this mill right there. They sawed it up and built the tower, helped us build it, younger men, you know. The first thing you know, we had the thing filled within three or four days. We filled Lake Spaulding.

MINK: How many inches did you get?

HATFIELD: Oh it was nothing about inches--just fill the lake. We went down to Colfax and then took the narrow-gauge railroad back up to Grass Valley and collected. Then we went down to San Francisco and caught the boat in San Francisco to Los Angeles, and got off at Santa Monica at the old pier there, you know, the one-mile-long old pier?

MINK: Right. And then took the railroad up to. . .

HATFIELD: Back to Inglewood.

MINK: That was a quick trip.

HATFIELD: Quick trip. I'm glad you brought that up.

MINK: Do you remember what year that was, Paul?

HATFIELD: That was in November, 1905. We ate with the

fellows at the lumbermill cook shack. They fed us fine.

MINK: Well, what did they think about what you were up to?

HATFIELD: Oh, they were glad to have us there.

MINK: What was the need for the water?

HATFIELD: The manager called Charley "professor." He was a nice fellow.

MINK: What was the need for the water, Paul?

HATFIELD: To fill the lake.

MINK: Well, what was the need for it? Was it for irrigation?

HATFIELD: You mean what'd they use the water for? Oh, down in Grass Valley.

MINK: It was for agriculture?

HATFIELD: Domestic uses, I guess--crops. Grass Valley was quite a little town, right there in the canyon. Ever been there?

MINK: I believe I've been through there.

HATFIELD: Beautiful little place.

MINK: Beautiful place, yes.

HATFIELD: The main line comes in at Colfax, then goes on down to Sacramento.

MINK: Now in 1920, you were on the eastern slopes of the Cascades in the state of Washington. Were you near Spokane?

HATFIELD: No, it was Ephrata. That's about one-hundred

miles the other side [west] of Spokane.

MINK: How did you go that time? Did you take the boat up to Seattle?

HATFIELD: No. We went by train to Seattle and took the train from Seattle to Ephrata.

MINK: And you could order your supplies there?

HATFIELD: And there was another funny thing. They knew we were coming, you know, and at all the little towns along the line, the train would stop and they'd go along and ask, "Where's Hatfield?" We had our heads out the window. We said, "We don't see Hatfield." They were looking for some old fellow with whiskers, you know--some freak of nature. [laughter]

MINK: They were all looking for you?

HATFIELD: Yes, as we passed these other places. And then when we got off at Ephrata, there was a gang there; we got off with our suitcases and all and went over to a hotel and, by gosh, we walked right through them. They were looking for an old man, too! Isn't that funny?

MINK: Yes.

HATFIELD: They were looking for some odd character, you see.

MINK: It says here that this was a \$3000 contract, apparently.

HATFIELD: Yes, that's right.

MINK: For every inch of rain?

HATFIELD: Yes.

MINK: And how much did you produce?

HATFIELD: We produced enough to restock their waterworks for them. They raised a bumper crop. More than the waterworks, imagine that?

MINK: Yes.

HATFIELD: Had an awful time there.

MINK: Where did you set up there?

HATFIELD: We set up south of Ephrata about twenty miles at Lake Moses. Lake Moses is a mile wide and twenty-two miles long. It's not a little thing to fill it up with water. It's deep in places. And that's where we got our water.

MINK: Well, let me ask you this, not about any particular contract, but just a general question.

HATFIELD: Anything.

MINK: Did your brother refuse a contract if there was no water in the vicinity from which he could operate?

HATFIELD: Oh, no, that was all right. If there was no water we could haul it in.

MINK: Haul it in?

HATFIELD: Haul it in; we could get some water.

MINK: Enough to make rain?

HATFIELD: Yes, could haul it in in tanks.

MINK: Was there any time when you had to do that?

HATFIELD: One time; and we didn't really have to do it then, but they brought tanks in. We just used their tanks that they hauled water up to the fields in for the harvesting. So they hauled us the water in the tanks; I've got a picture of it somewhere.

MINK: Where was this at?

HATFIELD: Up in eastern Oregon.

MINK: I see. He didn't really have to have water?

HATFIELD: There was water in streams like the Deschutes River. It wasn't far, only about two miles over to the river. And we didn't want to be on the river, because it was way down in a canyon. You can look down and see it way down there. We wanted to be up on top.

MINK: That would sort of limit your evaporation?

HATFIELD: Yes. The circulation and atmospheric movement by the air would be limited.

MINK: Did your brother ask them to haul the water in?

HATFIELD: No. They told him, "Listen, you don't have to worry about water. We'll get some water." And then they brought us these tanks.

MINK: Where did they put the water?

HATFIELD: They put it right alongside the tower, where we had our camp. They came right up and left the tanks and went away.

MINK: What did you do? Did you empty them out on the ground?

HATFIELD: Yes, some of it. We used it up. Then when we wanted more water, we would holler.

MINK: What did you do, just drain the tanks onto the ground?

HATFIELD: No. We didn't drain them out. We put some on top and some on the bottom, and we used the rest for domestic purposes. We used a lot of water.

MINK: I see.

HATFIELD: Of course, that was a poor way. There was so much fooling around. It was nice to have a lake, you know, like over at Hemet. There was a nice lake there. Or Lake Spaulding. Only trouble there was it was cold at five-thousand feet elevation.

TAPE NUMBER: II, SIDE ONE

MAY 8-9, 1969

MINK: Now, continuing this afternoon, Paul, you said you were going to talk a little bit about your Honduras contract, which I guess was your last one, wasn't it?

HATFIELD: Yes, it was. It was a real commercial contract. Well, in 1929, the Standard Steamship and Fruit Company of New Orleans somehow or other had gotten in contact with my brother Charles.

MINK: You don't remember how?

HATFIELD: No, not exactly. It was through somebody's recommendation, I guess. You know how things go. The banana plantations were on fire down there, and they had to have the fires put out. So they sent Charley a telegram, asking if he could come. And he wired them right back. They said if he would catch the first train, they'd hold their boat for him; so we did. We took the Sunset Limited to New Orleans; it was very nice; it takes two or three days to get down there, you know. We arrived there and went right aboard the boat and on down to Honduras. That took--I forget how many days--to cross the Gulf of Mexico. We landed at a little port of La Ceiba. The contract was calling for us to put the fires out. So we signed a contract with them for ten days and fifteen hundred dollars to put out the fire. We had the fires out in three days.

MINK: Tell me how you worked this one. How did you set up for it.

HATFIELD: Oh just the same as we set up anywhere--just the same as we did here.

MINK: You had a body of water to work with?

HATFIELD: Oh, yes. You see, one thing about that country down there, when they had droughts--it's wet country usually down near the equator there. But they had a long, dry spell, and these fires get started, you know, and it's terrible, and they keep going. Banana oil burns very freely. And furthermore, they had the banana trees planted too close together. So that was that. Then we came back, and then the following year they had some more fires and they sent for us and we went down and put those out--two years straight. Then they conceived the idea that they'd plant their banana trees to cut out every other one, which they did. They haven't had any trouble since, from what I've heard. And that's that on Honduras.

MINK: How much rain? Did you measure the amount of rain?

HATFIELD: Oh my, it just poured--lightning and thunder. The natives went haywire. All those fellows carry machetes, sharp as a razor. They cut each other up; there were two fellows cut up while we were there. They don't cut you once; they cut you all to pieces.

MINK: How long, after you'd set up, was it before you got

rain?

HATFIELD: The third day.

MINK: How long did it rain?

HATFIELD: Oh well, about those things, they are local conditions. There's a big rain, you know, and then maybe in an hour or so there'll come another one. But the natives--there's the funny part of it--they never saw anything like it. The manager was a white man. I forget his name now. He said, "Well, these fellows are going nuts out here; it's terrible." He was getting a little bit leery himself. He thought we were freaks, you see--just like they do in this country. And those people, you know, are very illiterate. They live in grass huts and shacks that have no floors.

MINK: What were the circumstances of the Texas contract?

HATFIELD: Well, down in Texas, the Chamber of Commerce of San Angelo sent for us in May of 1912.

MINK: This was an agricultural contract?

HATFIELD: It was all agricultural. That's mostly all cotton, though. So we went down there and signed a contract, and operated through June and July. And there's another funny condition. It wasn't anything like cyclonic or anything like that, but they were freak conditions and big rains. I've got a picture there of that great amount of water in front of three towers.

MINK: Yes.

HATFIELD: Why, it just poured. There was lots of thunder and lightning. And there was a fine crop of great big cotton--you know, those balls of cotton. And then they paid us off and we came back.

MINK: How much did you ask?

HATFIELD: Three thousand dollars.

MINK: Three thousand dollars an inch?

HATFIELD: Yes. Now we operated at Carlsbad, too?

MINK: New Mexico?

HATFIELD: No, no.

MINK: Carlsbad, Texas?

HATFIELD: That's part of that little narrow-gauge railroad there that runs over to Big Springs and Sweetwater. That's on the main line. From San Angelo over to Carlsbad is about twenty-five miles, I'd say. That's where I operated. There was a little pool of water, probably as big as this acre, right nearby; so that's why we picked that spot. But as far as the country's concerned, it's just like a prairie, level for miles and miles, as far as you could see--cotton and cattle.

MINK: I wanted you to talk a little about Hemet, too.

HATFIELD: There's another one. The Lake Hemet Land and Water Company, 1912, wanted us to come down there and see what we could do to fill their lake. There were plenty

of agricultural grain growers down there. And this man Lewis Rawson, I was just telling you about--he's now about eighty-four.

MINK: He's one of the people that we want to contact.

HATFIELD: He was one of the principal signers of the contract. So we went down and we guaranteed them seven inches of rain through March and April. Well, at the end of the time we had eleven inches and .50 some hundreths inches. Imagine that for March and April. Why, the average rainfall down there for the entire year is only about ten inches--at Riverside. That's a dry section.

MINK: I haven't asked you up to this point, but was there ever an experiment which your brother considered to be a failure?

HATFIELD: None!

MINK: He never considered that he had a failure?

HATFIELD: None, no. I'd say not.

MINK: I'm not talking necessarily about a contract in which he went out.

HATFIELD: No, you're talking about experiments.

MINK: Yes.

HATFIELD: Oh, no; one of the greatest rainfalls ever known followed our experiment out at Black Mountain in 1922. We went out there and Charley said before we left, "I'm going to do something I've never done before." I said,

"Well, let's go." So we prepared ourselves and went off to Black Mountain.

MINK: Where is that, Paul?

HATFIELD: About twenty-five miles--almost a little northwest of Randsburg, California. It's north of Red Rock Canyon. And we set up there at an elevation of about 3500 feet so we could see all over.

MINK: Did you have any water nearby?

HATFIELD: Oh, yes, springs.

MINK: There was a spring?

HATFIELD: Nice spring, a dandy.

MINK: Did the spring cover ground?

HATFIELD: Quite a little space.

MINK: What time of year was this?

HATFIELD: We started the twenty-sixth day of July, 1922.

MINK: Was this a contract or an experiment?

HATFIELD: No, no, private test.

MINK: This was a private test?

HATFIELD: This was a good one, too. All right, we started on the twenty-sixth day of July and on the next day it was partly cloudy--twenty-seventh. The next day it was cloudy--twenty-eighth. Then the twenty-ninth, the thirtieth. . . Then on the first of August, she opened up. It was twenty miles from where we were which is--well, it's twenty-five miles from here to Lancaster, so when you're

looking at a cloud like that, you're about twenty miles away.

MINK: Yes.

HATFIELD: It's about like that one up there--that little one.

MINK: Well, the ones that are over here on the horizon.

HATFIELD: Yes, that's about twenty miles.

MINK: Yes.

HATFIELD: Now these clouds and the whole thing came just about toward dark. There was a bunch of them coming this way and another bunch coming that way, and they united. Well, look out! We knew what it was going to do, and it was right over Sand Canyon which had a watershed of about four square miles when she opened up. I guess I'm the only eyewitness left. That was 1922. And it came just like that, lightning, one after another, hitting, and she unloaded. Well, water came down Sand Canyon, a narrow canyon, sixty feet deep. And down below the canyon was an aqueduct.

MINK: The water was sixty feet deep?

HATFIELD: Sixty feet deep! And the aqueduct runs right along there, and the water covered the aqueduct up for 1300 feet. Then comes the road--dirt road in those days--and then the railroad, and it covered up the railroad for ten miles. It brought boulders down as big as this room.

Brought down pine trees that were 200 and 300 years old.

MINK: That's what you'd call quite a flood.

HATFIELD: It took them way out on the desert. And the fellow that ran the aqueduct lived down at the foot, up on the side of a little knoll, and he said it sounded like a thousand freight trains coming down this canyon. And he rang up the Los Angeles engineers the next morning, and they sent out five of them and they spent a couple days out there surveying around. They said, "My gosh!" They figured this thing out that 240 inches of rain fell there in one hour. That's what they figured, over four square miles. Well, it had to be. And then they went up the canyon the next day--the water'd all run off, you see--and the sides of the walls of the canyon were just as slick as glass. It just ripped everything out.

MINK: Well, Paul, when your brother said that he was going to do something that he'd never done before, what did he mean--that he was actually going to create a deluge?

HATFIELD: Yes, he intended to make a surprise one.

MINK: To what?

HATFIELD: Sure, you bet, give them the works; that's convincing. That's the only proof. The results are what count.

MINK: In this case, did you bring all of your supplies up from Los Angeles or what for this purpose?

HATFIELD: Well, around this country, that's about where you go in Los Angeles, from the big wholesale drug companies.

MINK: How did you come up here? Did you take the railroad?

HATFIELD: Oh, we drove up. We had an automobile.

MINK: Oh, you drove an automobile.

HATFIELD: Yes, in 1922.

MINK: Did you haul your equipment in a trailer?

HATFIELD: No. We had a couple Model-T Fords.

MINK: Did you erect your towers?

HATFIELD: Yes, a little one, not a big one. Nobody was around, you know.

MINK: How many feet high?

HATFIELD: Oh, it was just about six feet.

MINK: You must have used an awful lot of chemicals for this.

HATFIELD: Oh yes, sure, a great deal.

MINK: Now do I understand this correctly; I just want to understand this. The days before the thing occurred, was this drawing the clouds into this area?

HATFIELD: That's it, yes, attraction.

MINK: Attracting the moisture in?

HATFIELD: That's it. Then the low pressure begins to form, and therefore it creates a kind of a vacuum-like, you see?

MINK: And just pulls it down--holds the water right down?

HATFIELD: No, no, it isn't that. There's a vacuum; then it causes condensation. And she begins to let loose. There's another thing: you've got to watch what time of year it is. You see, every month is different. There are twelve different months, and they're all different. Now that was a good time of year; it was hot out there, you know, right there over that old desert, right near Walker Pass. Do you know where Walker Pass is?

MINK: Yes. I know exactly where it is.

HATFIELD: It's near Freeman, a little across from Freeman.

MINK: You wouldn't think there'd be much moisture around at that time of year.

HATFIELD: Oh, no. That's an isolated spot. It was near a little town called Brown. Brown isn't there anymore. That's gone. It's not far from Inyokern.

MINK: It's getting up in the area where Lake Isabella is?

HATFIELD: Yes.

MINK: Well, I wouldn't think there'd be much moisture at that time of year, you know.

HATFIELD: Well, it don't take a whole lot--fifty percent; but that's pretty high. Usually right here, during the summer, it ranges about from under ten percent during the day to thirty-five and fifty percent.

MINK: The humidity today is probably what?

HATFIELD: Day after day it's about seven to nine percent.

MINK: Would this be a particularly good place for producing rain?

HATFIELD: Yes. It'd be fine. At night time the moisture goes up--maybe up to thirty-five or maybe fifty percent. Might even get a little dew on your windshield if you leave your car out--condensation. It's warmer inside the car, and the car sitting out, you know, it'll condense on the windshield. It was that way this morning. I had to go out and wipe it off.

MINK: One of the items that I noticed in the clippings was that I guess it was your brother's intention that he would sell the formulas and procedures for making rain to the government. Did he ever approach the government?

HATFIELD: No. The only time he did that was quite a few years back. He offered it to the government through the press. That's all. But as far as anybody coming direct to him to find out, nobody ever came by. They might have in a roundabout way, you know, trying to investigate; but we couldn't prove anything.

MINK: Did you ever feel in the course of this whole procedure that the government was trying to find out what you were doing?

HATFIELD: Well, not exactly, no. We had a suspicion.

MINK: Was it because of legislation that you and Charley

stopped taking contracts for rain? As I understand it the present federal legislation requires that anyone who offers their services for financial remuneration in order to do this must disclose the method by which they do it. Is this correct?

HATFIELD: You mean universally?

MINK: No, here in the United States.

HATFIELD: I don't know about the United States. But here in this state. . .

MINK: Oh, this applies to California?

HATFIELD: Yes. In this state, when Pat Brown was governor, there was a man by the name of William E. Warne who was head of the Water Resources Board. Anyway, the state legislature passed a law to keep Hatfield from operating.

MINK: To keep your brother from operating?

HATFIELD: Sure. First, you had to have a permit. That was all right--fifty dollars. Then when he starts the operation, he has to tell everything he uses. That killed it right there.

MINK: Well, why was this done particularly at this time?

HATFIELD: I don't know, maybe because he was afraid of him, on account of floods.

MINK: Then this would indicate, wouldn't it, that even though many people will say that there's nothing to it. . .

HATFIELD: That's just a few.

MINK: Just a few?

HATFIELD: There are just a few people that don't want it. They're that way with anything.

MINK: How do the meteorologists actually feel about it?

HATFIELD: Oh, well, even the elected chief of the United States Weather Bureau says it, himself. I've got it in print. Even with all the men that he's got under him he says, "What I need is a bunch of scientists, not a bunch of promoters." So those kind of fellows, they don't know; whatever they say doesn't mean a thing, and then if they did believe in it, they don't like it any way, because when we're up there it interferes with their forecast.

MINK: They can't predict rain?

HATFIELD: They can't predict; you see it yourself right everyday--even during this weather. You were laughing about it yourself. They predict rain and this is nice weather.

MINK: It's very true. I think this is most graphically demonstrated by this last rainy season that we had.

HATFIELD: That's right.

MINK: There were a number of storms in my area which were not predicted that caused great damage, as you know.

HATFIELD: That's true.

MINK: Especially the storm in February [1969] in the Big Tujunga Wash caused so much damage.

HATFIELD: Well, so many times here lately--in the last two or three months, I'd say--they predicted fair weather and then it'd rain--just the opposite. Then they predict rain and it's fair. I've seen them predict five-day forecasts numerous times, just fair weather--that the next five days there'll be no rain. Twenty-four hours later--less than twenty-four hours later--it was raining! They showed they can't even predict correctly for twenty-four hours ahead of time.

MINK: And certainly not for long-range forecasts.

HATFIELD: For long-range forecasting, five days is a long way. Weather changes rapidly, especially in the winter.

MINK: So, when did this legislation occur? Was this in the early 1950's?

HATFIELD: They've been talking about that ever since 1950, I think.

MINK: 1950?

HATFIELD: Yes, the state legislature.

MINK: When did they put it into effect? Do you remember?

HATFIELD: In 1961,* I think it was.

MINK: 1961?

HATFIELD: Why sure. Now you take that man Lewis Rawson

*The first statute was written in 1951 and subsequently amended in 1953, 1955, 1957, and 1959. See the Statutes of California (1951), II, Ch. 1677, pp. 3866-3869.

down there; I've got a letter. He offered me, myself, in 1962 or 1963--I guess it was 1963. He said, "I want you to come down here and produce rain, and I'll give you \$15,000." I said, "I can't do it. The state legislature won't let me; I'll have to tell what I use." That hurt those fellows; they lost everything that year. That was a poor year in 1963. Lewis Rawson.

MINK: But there would be nothing to prohibit you from going, say, out to Nevada and doing it.

HATFIELD: Arizona and Nevada are okay.

MINK: But it's just here in California?

HATFIELD: California, yes.

MINK: And it's mainly due to the State Board of Water Resources that the production of rain has been prevented.

HATFIELD: It's state law to take out a permit and tell what you use.

MINK: To what do you attribute this?

HATFIELD: Well, now isn't that a foolish law? Just take somebody else. What if he wanted to start experimenting? Well, he'd have to take out a permit, just to experiment, and tell what he uses. Well, it keeps fellows from trying to work--that is, on weather conditions, modification of weather.

MINK: It may be that the law is unconstitutional. But do you think that in the case of this bill, Paul, that they

had just your brother in mind?

HATFIELD: Well, he's really the only one.

MINK: Aren't there any others left?

HATFIELD: Not like him. These other fellows go out with silver iodide. Then they only claim they get five percent rain. That wouldn't amount to anything.

MINK: Actually, there's very little cloud-seeding that goes on now, anyway.

HATFIELD: That's right, and our own government has spent millions, you know, trying to find a way to seed clouds. So therefore, naturally, Charley'd be the only one.

MINK: Is it very expensive?

HATFIELD: I don't think so.

MINK: What about this process of dry ice?

HATFIELD: Dry ice? They shoot it up and go up in an airplane and different ways, you know. And furthermore-- you understand this--suppose you went up there, and a cloud was up there and you shoot some iodide in it, some rain might come down; that's only right here; it's not going to rain over there a mile away.

MINK: Well, what did your brother usually figure was the radius that he could make it rain?

HATFIELD: Well, we figured a good radius was about fifty miles.

MINK: That's a very good radius.

HATFIELD: Yes, that's pretty good. Usually the clouds move from west to east; that's the general drift, you know, off the ocean, inland, then out across the United States. But east of us, we always noticed wherever we operated, the rainfall was much heavier east than north, south, or west.

MINK: Well now, have you ever operated west of here? In Los Angeles?

HATFIELD: Oh, you mean up around Ventura, someplace?

MINK: Well, I suppose that would be west, yes.

HATFIELD: That's west, yes, unless it'd be out in the ocean.

MINK: Well then, you got more rain in the Southern California area than when you tried to produce it up north?

HATFIELD: Yes.

MINK: Did your brother ever try to patent the process?

HATFIELD: Oh, he wouldn't do that. There'd be rainmakers springing up all over the United States.

MINK: Well, no, if he got a patent for it that wouldn't happen.

HATFIELD: No, they might change it just a little bit.

Sure, Charley thought of that.

MINK: But he was afraid that if he did that someone else would then copy his process?

HATFIELD: Oh, sure. We thought of that forty years ago.

MINK: And did you feel that the risk in doing this because of the small amount of demand that there might be for people to do this would make it very risky to patent it? Or was there a large demand for people to do it?

HATFIELD: Well, a fellow was up against it. Then what if the government did want it, then what are you going to do, see?

MINK: Well, sell it to them.

HATFIELD: Oh, no. It would be better to give it to them.

MINK: He'd give it to them. Is that what Charles had in mind?

HATFIELD: Yes, to give it to them. Well, suppose you sold it to them. What would you do with the money after you got it? Sure, it was your own government, the United States government.

MINK: But nobody in the government was ever interested in even coming and actually formally receiving the procedure, is that correct?

HATFIELD: That's correct. Of course, they had certain men, but they would spread out. And eventually, you know, this thing was just like getting a patent. They'd put two and two together and work on something else, you see. He said that, I guess, about twenty-five years ago. He said, "Well I think we'll give it to the press, to see what they can do with it." You know, to let them know about it; and

he put it in the press. In one of those books there's something about Hatfield offering it to the government. It's in one of the scrapbooks.

MINK: Yes, I think it's in there. And in connection with that, I notice that after you returned from Honduras, that he made an offer to the areas of the drought-stricken Midwest to produce rain. Did you ever hear any response from this?

HATFIELD: You mean the dust bowl?

MINK: Yes, in the 1930's.

HATFIELD: No. But once in a while we get a letter from there.

MINK: I think he offered to go back there and do it for the transportation.

HATFIELD: That's it, just for the expenses. Free, you might say.

MINK: Did you ever go back and do anything?

HATFIELD: No.

MINK: You didn't get any offers?

HATFIELD: Once in a while we'd get a letter in regard to what would you charge to come and produce rain for such and such a county in western Kansas or in Oklahoma and in certain of those dry belts, you know.

MINK: And what would be your response?

HATFIELD: Well, we'd write back and tell them that we'd

have to go through an awful lot, anyway. That was just one man writing. But if they had a committee or something that could send a representative out here, we'd help them.

MINK: To negotiate a contract?

HATFIELD: Yes, that's it. Talk business. But there was kind of a smart fellow--the only smart one back there--who had nerve enough to write, anyway.

MINK: But nothing ever came of that?

HATFIELD: Not that section. That would have been a dandy; I thought about that in Oklahoma.

MINK: What was going on with Charley during the 1930's then--what was he doing? What were you doing?

HATFIELD: Oh, you mean what kind of work?

MINK: What kind of work, yes?

HATFIELD: Oh, we tried a lot of experiments.

MINK: In the 1930's?

HATFIELD: Oh, sure.

MINK: Could you tell me something about some of them?

HATFIELD: There were different ones all over the country.

MINK: The clippings don't tell too much about those.

HATFIELD: No, not those things. Well, there was one right here at this place before Charley passed away. On November 15, he started tests right here. And he passed away on the twelfth of January of 1958. He started then and had rain within five days, and kept it up. Then after

he passed away, I kept right on with it up through April. Right here we had more rain than there was this year. We had twelve inches of rain right here.

MINK: Where did you set up your towers?

HATFIELD: Out in back here. Nobody was around us; there was no parks then. There was nobody next door--no house there then--all was quiet around here.

MINK: How high a tower did you use here?

HATFIELD: It was twelve feet high. North of us they had twenty-three inches of rain.

MINK: That was in 1958?

HATFIELD: It was really in 1957 and 1958.

MINK: And that's the last one you did?

HATFIELD: That's the last one. This law came out then, you see. I think it was in 1961.

MINK: You said you would describe some other experiments that you carried on in the 1930's and 1940's.

HATFIELD: I'll tell you--some of those I know; but if I go and tell you all of those, what good does that do?

MINK: Just to sort of get an idea of what was going on in this period.

HATFIELD: Well, I told you the last one.

MINK: Yes.

HATFIELD: That was a good one. And it was right here.

MINK: What kind of work was Charley doing?

HATFIELD: Nothing. He was retired.

MINK: When did he actually retire?

HATFIELD: Way back in about 1933, 1934, or 1935, I guess.

MINK: Now this is a question you don't have to answer if you don't want to. It's a question about Charley. Did he figure that by that time, he'd made enough money from what he'd done in order to retire?

HATFIELD: No. That didn't mean a thing.

MINK: It didn't mean a thing?

HATFIELD: No, no--he had just enough to get along on; he put it all back into his work like a lot of men do.

MINK: Well, how would he put the money back in?

HATFIELD: Oh, by experimenting and testing, you know. He made small tests, big tests, and medium tests.

MINK: So that after he retired, in the 1930's and the 1940's, he did continue to carry on various experiments?

HATFIELD: I can tell you right now that all together we tried 503 tests. And we never made a failure. We got rain in each and every one of them within the sixth day.

MINK: Did you keep record books of the experiments?

HATFIELD: Of course, we had reports.

MINK: Like a diary, sort of?

HATFIELD: Yes. Now I'll tell you about that. You see, my brother had a bunch of books like that. He kept them all together and they disappeared. I never could trace them.

MINK: Did Charley have them?

HATFIELD: Yes, he had the log of each demonstration-- like if we went on a contract, well, it would say January the fifth, something like January the sixth, so on, until the expiration of the time. Oh yes, we had all that for every contract.

MINK: It's too bad they've disappeared, because it would be valuable information about the whole process.

HATFIELD: Yes, that's right. They were day-to-day reports. If only a fellow could get that.

MINK: I would assume that such information as you kept would be in your own handwriting, and it might describe, you know, your daily activities?

HATFIELD: Yes, I know all of it was in our own handwriting.

MINK: It would also tell what you did while you were on the contract.

HATFIELD: Yes.

MINK: And it would tell who came to visit you maybe--people of importance.

HATFIELD: Yes.

MINK: Who would you say in all the times you were with Charley on these contracts was perhaps the most important person that ever came to observe what you were doing?

HATFIELD: The most outstanding?

MINK: Yes.

HATFIELD: Well, the most outstanding contract was the one for San Diego.

MINK: I understand that, but I'm talking about people actually visiting your camp. You had reporters come. You had people from all around the country that lived in the area come to see what you were doing, but I mean what distinguished people?

HATFIELD: Well, in San Diego we didn't have any, because first thing, you know, you couldn't get there. Well, right at the start we had a few natives around, you know; but then it got so nobody could come; they couldn't get in there. But, oh, let's see. I guess there were some at Los Angeles, in the Yukon, then in Texas. Of course, Honduras was no good. That was all native people. But that was a wonderful contract. We went down there, and in ten days, you know, we put those fires out.

MINK: What about your experiences in Ventura County?

HATFIELD: We weren't there.

MINK: You didn't go up into Ventura County?

HATFIELD: No, no. That's only in some article. There's an article, too, about us being in Italy. We never were in Italy.

MINK: Yes. I was going to ask you, did you actually have offers from Tunis in Africa?

HATFIELD: Oh yes. We got lots of letters from Africa.

MINK: Well, what made Charley decide he didn't want to do it?

HATFIELD: That's too dry a country.

MINK: You didn't feel that you would be able to succeed there?

HATFIELD: No. That was way over there, you know, away from home. There is no place like the United States. Canada's all right; that's close. Honduras was far too; but they begged us, so we had to go, and it was only a ten-day trip.

MINK: Was it that you didn't want to go because it was just too far to go away from home, or was it because you felt that the procedures you used wouldn't work?

HATFIELD: You mean over there?

MINK: Yes.

HATFIELD: No. It would work there just the same as it would anywhere else.

MINK: Charley simply didn't want to go that far?

HATFIELD: We both talked it over. He said, "Well, I don't know. It's all right, but why go? We don't have to go just because they want us." There were lots of other places. We got lots of letters from Australia.

MINK: There are lots of dry areas in Australia.

HATFIELD: Oh, sure. Just like it is down in Africa.

MINK: But you didn't want to go to Australia either?

HATFIELD: No--well, we were busy here. There were all kinds of contracts; we could have had more if we wanted to go after them.

MINK: Was the reason that you didn't take on more because if you had you would have had to hire people, and therefore that would have meant that you would have had to bring people in on the procedures? Is that correct?

HATFIELD: Well, you mean hire somebody?

MINK: Well, supposing that you wanted to go into the business of making rain. Say you were going to set up crews to go out into various areas to do this thing. You would stay in your office and manage it. Now would you want to go into this kind of an operation? As I understand it, it's because it would mean revealing the procedures that you and Charley had perfected.

HATFIELD: You might as well get a patent on it and have it over with.

MINK: Right. So that's why you were unable to take on more contracts?

HATFIELD: No. It couldn't be done.

MINK: Did you ever talk about it?

HATFIELD: Well, it could be done. That's not a proper thing to do, though.

MINK: Did you ever talk about that?

HATFIELD: Oh, yes. I've had fellows beg us to do that.

MINK: People that wanted to finance you?

HATFIELD: Yes. But then you might as well give them the secret and have it over with.

MINK: That is certainly part of it.

HATFIELD: Yes. That's what I say; you're really stuck, you know. And then they passed the law; you can't even operate yourself.

MINK: It seems strange to me that they would have waited so long to pass this law.

HATFIELD: They had been legislating it ever since, I think, 1950 or 1951.*

MINK: Who, the State Water Resources Board?

HATFIELD: Yes, the state legislature. The one that signed it first was Charley Brown. He's since died.

MINK: Who?

HATFIELD: Charley Brown, from that Shoshone Indian country at Death Valley. That's his section. He was a state senator.

MINK: And he was the one that presented the bill?

HATFIELD: Yes. I met old Charley. We both knew him.

MINK: Were you friends of his?

HATFIELD: Oh, just an ordinary acquaintance, though. He owned the grocery store out at Shoshone.

MINK: I see.

*See note p. 125.

HATFIELD: They had quite a lot of Indians out there, you know. They liked Charley. He fed them; then they all voted for him. That's the reason he was put in office. But he since died here about five or six years ago.

MINK: Was he the one that was advocating this bill?

HATFIELD: I don't know about his agitating so much; but he was one of the bunch. He was one of the founders.

MINK: Were there others that you know of?

HATFIELD: No. I don't know the rest of them.

MINK: It just seems strange to me that all of a sudden, after so many years, that they would decide to do this. Why didn't they decide to do this in 1910, for example, or 1920--you know, to cut you off then? Why wait until 1961?

HATFIELD: That's it. Well, I don't know. I guess, along about the 1920's was the best time--after San Diego. Well, they talked; you know how people talk, talk, talk. Year after year goes by, then they heard about this 1922 cloudburst. Well, that was a fright. Imagine covering the Southern Pacific tracks up for ten miles.

MINK: Did you ever hear about this from the Southern Pacific?

HATFIELD: Southern Pacific?

MINK: When Charley created this cloudburst, was it known that he was connected with it?

HATFIELD: Oh, it got around, but I don't know; I know the

papers had it.

MINK: Did anybody know that you were out there in 1922?

HATFIELD: No.

MINK: There wasn't anyone that knew?

HATFIELD: No.

MINK: Except your wives?

HATFIELD: That's right.

MINK: Or did you take them along with you?

HATFIELD: No. We went by ourselves. We were only out there for a short time.

MINK: You were out there in the Mojave how long--four or five days?

HATFIELD: I was out there I think that time, pretty near two weeks.

MINK: Was that experiment--you know the one that was so horrifying--the only one that you did out in the desert?

HATFIELD: Yes, outside of this one at Pearblossom.

MINK: At your property here?

HATFIELD: That was desert proper. They don't really call this desert here. You know, it's kind of semi-desert here. You've got to get way out around Randsburg to hit real desert.

[MAY 9, 1969]

MINK: In relation to the interview yesterday in which we were talking about the experiments conducted in Sand Canyon

in 1922, I wish to read the following document onto the tape, because Mr. Hatfield does not have a copy. "Report of operations conducted upon the Mojave Desert twenty-three miles northwest of Randsburg at Black Mountain, elevation 4,000 feet, from July 26 to, and including, August 2, 1922. These operations are conducted solely from a private standpoint, and the selection of this particular arid field and heated time of the year is to demonstrate and show conclusively that rainfall will result from a series of tests from the air.

Wednesday, July 26. Began operations at 7:30 AM. At the time no visible clouds in sight, it being clear--positively so.

Thursday, July 27. A few cirrus clouds could be observed here and there during the afternoon, and to the southeast some large cumulus formation had appeared.

Friday, July 28. Considerable cirrus covered the sky in all directions, and cumulus formations formed during the day.

Saturday, July 29. Cumulus formation grew during the day. Towards evening a heavier bank of solid cumulus appeared from the east which completely covered the sky by 8:00 PM.

Sunday, July 30. Considerable formation in the east during the morning. As the day advanced, cumulus formed in all directions late in the afternoon and became cloudy

with rain falling toward the west and south. At night, cloudy with nimbus formation, light sprinkles falling at 9:30 PM.

Monday, July 31. Began raining at 3:00 PM and so continued until 7:00 AM, at which time 1.5 of an inch precipitated itself. Rest of morning cloudy and partly cloudy. Heavy cumulus again formed during the afternoon with light showers at 6:00 PM. A few flashes of lightning to the south about 7:30 PM.

Tuesday, August 1. Heavy cumulus formed in all directions, especially to the east where some gigantic cumulus clouds were growing to immense proportions. These gigantic formations moved north and west towards the southern end of the Sierra Nevada range of mountains, being an air line of about twenty miles from our rain-producing plant, and these collected themselves into great cumulus clouds which towered thousands of feet in the sky--some to the left, and some to the right--and as the night came on they came together and were accompanied with vivid flashes of lightning which continued for an hour or more, and an immense rainfall occurred at the head of Sand Canyon of cloudburst proportions. My brother Paul and myself witnessed this great sight from the west side of Black Mountain in the El Paso range to the south of Sand Canyon.

August 2. A few small cumulus during the day, stopped operations at 4:00 PM. [Signed] Charles M. Hatfield."

This document is a typed document signed by Charles M. Hatfield. Would you comment on this article by Jack Jones in the Los Angeles Times, "When the Rainmaker Couldn't Turn off the Tap?"

HATFIELD: I was taking the Times at the time I was there; I read about it. That's somebody's idea; we weren't in no tree at all.

MINK: Well, here's another article, for example, from Coalinga, that says, "Rainmaker Treed by Rainfall. . ."

HATFIELD: That's Coalinga.

MINK: Yes, that's Coalinga.

HATFIELD: That's all right; that's clear. That's supposed to be Coalinga.

MINK: Tell me about the tree; what happened?

HATFIELD: Well, there's no tree to it; we didn't go up in any tree. No, it rained; it rained hard, too; it was wet and damp and muddy--but that's just some reporter, I suppose, or cartoonist, and he put Hatfield up in a tree.

MINK: What about this one here? That's at Coalinga.

HATFIELD: That's Coalinga, sure, in 1924. We called it Coalinga because we were only about six miles out of Coalinga, where we demonstrated up around the west side of the San Joaquin Valley in the foothills of the Coast Range. If you go over the hill a little further you hit Paso Robles, but we were on this side. We could look right over the

San Joaquin Valley. Coalinga was on the west side, but the farmers that we were making the rain for were east of us at the Tulare Lake section--Corcoran, Hanford--those places in there--Lemoore; and in fact when they paid us, they paid us for Lemoore back. We went and collected there three different times--1924, 1925, and 1926! And they raised immense crops of wheat. That's all wheat country.

MINK: But as far as you know, you or Charley never had to get up in a tree to escape the rain?

HATFIELD: No. We had to laugh when we saw that kind of thing. You see all kinds of cartoons there.

MINK: Yes, that's true.

HATFIELD: In the early days there were not so many as nowadays. But he used to be great for that, not only with Charley, but with other things.

MINK: Now here's a clipping that's not dated, but it says that Charley "may share the secret with the government." It says that "For twenty-seven years the government meteorologists have been looking upon Charles Hatfield and his rainmaking activities as something of a joke." Did they always think it was a joke?

HATFIELD: Well, some people. What was that date?

MINK: There's no date on this, but I'd say it was probably around 1930; wasn't that when he offered it to the government?

HATFIELD: It looks like it was earlier than that.

MINK: "Maybe the joke's on them," it says here.

HATFIELD: That might have been way back at the start.
Let me see that article.

MINK: Was this way back then?

HATFIELD: Oh yes, that's way back when we started.

MINK: Well, apparently it was twenty-seven years that
he'd been experimenting at the time it was written.

HATFIELD: Today, you know, it's sixty years.

MINK: Well, they did regard him as somewhat of a joke
then?

HATFIELD: There are still people; probably you've spotted
them yourself.

MINK: No. I haven't met anybody.

HATFIELD: Well you know they're not so skeptical today
as they were, because there's so many new things that have
come up that they ridiculed, not only rain, but other
things, like space, you know, and all this. And I remem-
ber the day of ridiculing electrical inventions. That's
right. People ridicule most anything.

MINK: Apparently, in 1931, he gave a talk in Redlands. Do
you remember the talk that he gave about his work, and he
describes in some detail the methods he used. Do you
remember anything about this one here? It's from the San
Bernardino Sun of May 2, 1931.

HATFIELD: It seems to me that he made an address. I think about that time there wasn't a public lake at Big Bear. You see, that water they had dammed up there, they used that for irrigation down below. It was getting low, so there were a couple fellows that came, and they got him to go up there and look it over, and I think he made an address.

MINK: In Redlands?

HATFIELD: Sure, he did. I think it was right there at Big Bear.

MINK: How did he feel about the Big Bear situation?

HATFIELD: Oh, if that was all it is, that was fine. But some way or another they didn't get together. I don't know just what it was. But I think there were two factions, two different companies that drew water out of Big Bear for irrigation down around Redlands or somewhere down there. But he made the talk or some kind of address. Oh, he made lots of addresses where we'd go on a contract. Before we started the fellows wanted to know what we were going to do, how we were doing it. They wanted to know a little about it. So we'd all get together in some hall or some place and we'd tell them what the score was. That's nothing at all.

MINK: Did you find that after he'd tell them what he was going to do and explained things that they felt it was a

simple thing? Would they feel better about it?

HATFIELD: There was nothing harmful about it; some people thought it was harmful, you know.

MINK: I see.

HATFIELD: They knew we were liberating chemicals, you know, and things like that, and that they would have an influence on the atmospheric conditions; they'd breathe it, you know, and all that.

MINK: Maybe poison?

HATFIELD: Well, we lived right there; it didn't poison us. We're still going after sixty years.

MINK: I'm sure that in the time that you were doing your experiments you've gotten a lot of whiffs of the chemicals that you used; did they ever bother you?

HATFIELD: Oh, no, no, they never bothered us. We were both in fine shape. Charley was in good shape, but his heart gave out.

MINK: I see.

HATFIELD: He was all right up to that time; he was pretty near eighty-three.

MINK: Another thing you were telling me yesterday: that if I could stay around here for a month that you'd be able to tell me a lot about the weather conditions. I guess that this probably is going to be a fairly short interview and will probably end our formal tape recordings. But in the

study of weather conditions here in California, you know, you told me that you studied; you kept records; you collected the records, and you got the records from the weather bureau. How extensive was your collection? Do you have records for every single official rain gauge in California, or did you have it sort of spotty--you know, here and there?

HATFIELD: Oh, you mean complete records?

MINK: Yes.

HATFIELD: It's like this.

MINK: Yes, like the one that you showed me.

HATFIELD: That's put out by the United States government.

MINK: I understand. But did you collect them from all over California, or all over the United States?

HATFIELD: Oh, no. We didn't care about anything but just California.

MINK: Did you collect them from every place in California?

HATFIELD: Well, the town we were operating in. We don't care about it now, but if I was going to operate now, I'd be ordering these, so I could see what was the amount of rain that fell around Southern California in different spots. Then we'd begin to figure out where the heaviest was. Well, the heaviest was right here.

MINK: Say you were going to do a contract at a place like Monterey Park. Then would you look at the rain records

for every single rain gauge that there was in Monterey Park?
Maybe there was only one.

HATFIELD: No. We would know there were some gauges around
the district. And we'd send for this record for this month.
You can get them, you know.

MINK: For how many years back would you want to go?

HATFIELD: Oh, just during the time we operated.

MINK: Well, would you be looking at old records of that?

HATFIELD: No. We didn't care about old records. Now
here's one for September. It gives all the rain.

MINK: September of what year?

HATFIELD: It gives all the rain that fell in September
of 1939 over the entire state.

MINK: Yes.

HATFIELD: When we were operating in Eagle Rock, as the
records show, that the heaviest rainfall during this time
fell at Mount Wilson. Well, that's high up; but it's the
biggest, and if you look up past records, it's the heavi-
est rainfall ever known in September anywhere in Southern
California. It was pretty near 11.72 inches that fell in
twenty-four hours. Imagine that!

MINK: That's quite a lot of rain.

HATFIELD: That's the way we had them, you know; you can
get them; we got one from San Diego, too.

MINK: What I'm asking, I guess--after you'd conduct the experiment, then is that when you'd want to check the records, to see whether the experiment was successful?

HATFIELD: Yes. You get the record then because you don't know where these places are, you know. You'd have to write to them. Here you've got them in print. Each fellow'd send in the rainfall every month, you know. It depended on who they were. Some are voluntary observers, you know, and some are regular weather bureau station personnel. And there they are. If you want to know anything, that's the way to find out--afterwards, after it's all over.

MINK: Say somebody made you an offer, you would never go back in the records of the weather bureau to see how much rain had fallen in that region?

HATFIELD: Yes, you'd have to. Suppose it was like when we used to go up to Crows Landing.

MINK: Right.

HATFIELD: All right, what is your normal rainfall there? You have to take an average of years past.

MINK: Yes.

HATFIELD: All right, we'll say it's 2.5 inches; well, we'd give them that.

MINK: Oh, the averages of the years past is what you based your offers on, right?

HATFIELD: Probably they wouldn't even have got that. But we'd give it to them anyway. Now we were to be paid for whatever falls over 2.5 inches. There's no fairer proposition than that. You see that; they all said so--all these farmers. "Sure, that's fine, Hatfield. Go to it. You can give us the extra amount. That's what we need to raise wheat." So that's the way we used to do it. We wanted it as fair as possible. These so-called fellows with dry ice, you know, up in the mountain, they don't give anything. They'd hire supervisors and stick them up there and let them go to it. They probably got a rake-off out of it--\$50,000, that's what they paid them.

MINK: Do you have in mind one particular time?

HATFIELD: Oh yes, they'd operate about November, all through the winter months.

MINK: This year?

HATFIELD: I don't think they're up there any more. They were for two or three years. I don't think they've been there the last two or three years.

MINK: They've sort of given up?

HATFIELD: You never read about them and never hear anything about them. There used to be big articles in the paper about them.

MINK: This article we're looking at now is from the Times-Picayune in Louisiana. I guess that would be the New Orleans

Times-Picayune for Wednesday, April 29, 1925. Look at the height of this tower over here.

HATFIELD: That's not our tower.

MINK: That's not your tower?

HATFIELD: No. They were probably taking a picture. There you are again with some reporter, you see.

MINK: Well, what is this tower here? Is this an oil well?

HATFIELD: I don't know.

MINK: An oil rig?

HATFIELD: Looks like that's some oil well down there.

MINK: Now it says here, "A tower used in California to produce rain, similar to the one used by Charles M. Hatfield."

HATFIELD: The highest tower he ever had was his first one--thirty feet high. All the rest of them were around twenty-four feet high. That one in the paper looks to be about forty to fifty feet.

MINK: It even looks a lot higher than that.

HATFIELD: It looks like an oil well outfit.

MINK: Well, now what was this contract? This was in 1925. Would this be the sugar contract?

HATFIELD: 1925?

MINK: Yes.

HATFIELD: Oh, that's the one up at Coalinga in 1924, 1925, and 1926. [tape pause]

MINK: Then you think this article here is not correct?

HATFIELD: No. That's not correct. That's the first time I ever saw it when you pulled it out.

MINK: He never was down in the La Panza plains?

HATFIELD: No. I never was there; Charley wasn't either.

MINK: Paul, I think maybe you've forgotten about this; now here's another one from the New Orleans States, dated April 28, 1925, in which Charley offered them two inches for \$8,000. Now this was to the sugar planters again. Were you not in on this?

HATFIELD: No.

MINK: Maybe he went down there on his own?

HATFIELD: No. He never got away from me. No.

MINK: That's strange.

HATFIELD: Is that another one?

MINK: This is an article from the Morton County Progress at Elkhart, Morton County, Kansas, June 18, 1925, in which it says that the Morton County people were interested in your brother's work.

HATFIELD: Yes. We were never in Kansas. Lots of times different states had articles, you know.

MINK: Yes.

HATFIELD: Oh, we got a lot out of the New York Times.

MINK: There's quite a bit in here about your brother and his early experiments and some of his first demonstrations. The article that is reprinted here, apparently, is the one

by John B. Wallace called, "Hatfield the Rain-Caller."

Do you remember that article?

HATFIELD: No--well, I don't recollect the name.

MINK: No?

HATFIELD: Might have been a reporter.

MINK: He mentions some early things. [tape pause]

HATFIELD: Yes. That's me, and there's Charley. This fellow's handing him a check, right.

MINK: This is an article that appeared in the Fresno Bee.

HATFIELD: Yes. That's right.

MINK: It was on Friday, April 18, 1924.

HATFIELD: Yes.

MINK: And this shows you getting paid off for fulfilling your contract.

HATFIELD: Yes, we're getting a check for \$8,000.

MINK: At the bank?

HATFIELD: At the bank; this bank's in Lemoore; it says so right there.

MINK: Yes.

HATFIELD: These two fellows are a couple big farmers.

MINK: Were they part of the people that signed?

HATFIELD: Yes, they were a couple of the signers. They wanted to see that we were paid, you see?

MINK: Apparently, while he was in Coalinga, Charley went up to Fresno and made an address up there, because it says

that he visited Fresno and talked about his work.

HATFIELD: Well, I tell you--he made an address, but I don't think it was at Lemoore or at Fresno. I think it was at Corcoran.

MINK: Corcoran?

HATFIELD: That's near Hanford there; all those towns are pretty close together.

MINK: Now this one here is from the Los Angeles Record for Friday, February 29, 1924, in which apparently he told the reporter--this was for both Ventura County and San Bernardino County that were seeking his services--that these were two sections of Southern California that wanted him to come--San Bernardino and Ventura counties. Then he said he would bring a storm in two to six days; apparently there was quite a drought.

HATFIELD: Yes, that's right--it would be; that'd be inside the sixth day; never went over the sixth day. But we never operated in either of those places--San Bernardino or Ventura County.

MINK: Now, there's another thing. Apparently the Record put something in here. It says that news reports say that "Hatfield may be employed to bring the storm to Southern California," you see.

HATFIELD: "May be employed."

MINK: "May be employed."

HATFIELD: That's it; there was some talk like I told you about Big Bear. Someway or other it fell through. Well, there was lots of that. Maybe a reporter got mixed up. In 1924 we were up in Canada.

MINK: You can't remember why you decided not to accept these contracts in 1924 in San Bernardino and Ventura counties?

HATFIELD: Well, there was some argument about how to get together. I don't know who really owned that--some irrigation company, I imagine--and something came up that they couldn't. But we'd have gone. That'd have been easy to fill at Big Bear. That's just a small lake.

MINK: Now here's an article from the Los Angeles Illustrated Daily News for Friday, July 29, 1927, in which it says that Panama had sent up a request to Charley to go down there. They sent cablegrams. The cablegrams came from the Anti-Drought Association of Panama and were forwarded by the mayor of Los Angeles to Hatfield at his Los Angeles address. They were signed by Darrell, chairman. Do you remember anything about this?

HATFIELD: No. He never went to Panama.

MINK: He never went to Panama?

HATFIELD: There's nothing to it; I've never even heard of it; that's an article that I didn't know a thing about it. It's just some story. [tape pause]

MINK: One other small thing here: he was telling about the house here. You say that the house on Melrose Avenue was built in 1891?

HATFIELD: Yes, this house was on Melrose Avenue at Heliotrope Drive right across the street from the Los Angeles City College. That same land where the college is now used to belong to the old Sullivan family. They had 160 acres in there and they afterwards sold this land to the Los Angeles College [Southern Branch]. This is a wonderful picture. My father bought ten acres there. There wasn't any Heliotrope Drive; you can see what Melrose looked like. And he built that house in 1891.

MINK: Then you were saying that he sold it to two old maids?

HATFIELD: He sold it to two old maids in Pittsburgh. I think he sold it in 1894. He never stayed long in one place, you know. He sold it to these two old maids for eight thousand dollars.

MINK: Imagine that.

HATFIELD: Well, he made money. [laughter]

MINK: Sure, and people have been making money on it ever since. [laughter] Did you actually go down to Hemet to visit Rawson?

HATFIELD: No, he came up here half a dozen times.

MINK: And how long had you known him? How long have you

known Rawson?

HATFIELD: Oh, since 1912.

MINK: 1912?

HATFIELD: Yes.

MINK: You met in Los Angeles?

HATFIELD: He was one of the signers on the Hemet contract.

MINK: Now it gives here the news that Paul Hatfield and his brother Joel are carrying on the work. Was Joel involved with you at any time?

HATFIELD: No, no, no! Jennings knew I had a brother Joel, you see.

MINK: Who's Jennings, the editor of the paper?

HATFIELD: He's a writer. He works for this paper and was born in San Diego. In fact, his uncle used to be sheriff of San Diego County way back. They were old-timers, you know. That's what I say, you see. Even if you know them, they get things wrong.

MINK: Paul, you've handed me a statement that was written by your brother Charles Hatfield about three years before he died in 1955, which I think we'll put into the record here: "The forces that are released upon the atmosphere and the powerful chemical attraction, working in harmony with the very forces of nature, herself, in order to bring about precipitation and which have been so successful during the past fifty years in the twenty-eight commercial

contracts that have been entered into by me in various portions of the arid West, and over five hundred tests, all successful, with good rainfall from 100 percent to 500 percent increase. These demonstrations will be classified as experiments compared to the immense rainfall that will occur following these operations in the future. There has been no change made in these demonstrations; this remains the same as has always been in force in the past fifty years of this important work. It is only a case of augmenting and building up the forces and influences that have successfully dominated these operations over the many dry and arid sections of the country. The combined strength and every known force and attraction recognized by me will in the future be used, only carried on many times more powerful than those used in the past. These forces used and applied to induce low barometric pressure, which in turn, induce rainfall, will be the most powerful union of chemical forces ever attempted by me in bringing about rainfall. I invite the close attention of the people, locally, nationally, and internationally, to watch with interest the results in the way of precipitation following these demonstrations upon the air from now on, for it will be these future tests that will establish the principle and settle beyond all doubt that rain can be induced to fall through artificial assistance."

Paul, why did he write this? Why did he write this statement? For what purpose?

HATFIELD: He wrote it probably for reporters. He probably knew he was kind of weak and was weakening little by little, you know. Well, at that time, in 1955, he was eighty, you see. He was beginning to slip a little. His heart was a little weak anyway.

MINK: Always?

HATFIELD: That was the only trouble with him; other than that, he was good.

MINK: Yes.

HATFIELD: But, he wanted to show the public. If he'd only been a little younger, you know, about that time--twenty years younger, we'll say--and myself the same way, we would have gone out on the desert--way out somewhere around Death Valley. We would give them the works. Death Valley's quite a dandy place, especially Telescope Peak; you ever out in that country?

MINK: Yes.

HATFIELD: Well, you know all about it. I've been out there lots of times; we used to go out there years ago.

MINK: Did you ever talk about the possibility of inducing rain out at Death Valley?

HATFIELD: No, no, not exactly.

MINK: With your brother?

HATFIELD: Not really in Death Valley, no.

MINK: No?

HATFIELD: That would have been all right, though, around Telescope Peak; that's 11,000 feet, you know.

MINK: What about the Mahogany Flats area of Death Valley? That's near Wildrose Canyon, in that area up there.

HATFIELD: Well, that was all right; that was good. It's on the other side of the mountain.

MINK: What's particularly good about that area?

HATFIELD: Because, you see, you're going down to sea level as you come on down towards Stovepipe Wells.

MINK: Yes.

HATFIELD: And as you come this way, you're going up a grade, over that Townsend Pass. Well, that's fine.

MINK: Well that, then, is sort of a fitting close to our interview, and as I understand it from you, now, what you will do, as you think of certain things that might be added to these recollections, why, you'll send me a statement, and I may from time to time send you some questions to answer, based on what you have sent me.

HATFIELD: Oh, sure.

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