Oral History Interview

with

MR. REUBEN B. ROBERTSON and MR. E. L. DEMMON

Asheville, North Carolina February 15, 1959

by Elwood R. Maunder Forest History Foundation, Inc.

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> Mr. Reuben B. Robertson died December 26, 1972 at Asheville. He was 93.

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MAUNDER: Mr. Robertson, we would like to talk to you especially about the beginnings of the paper industry in this area. We know that you go back to some of those early days and perhaps you can tell us a little bit about how Champion got into the pulp and paper business/here in this section.

ROBERTSON: The Champion interests along in 1904 and '05 were conducted under the name of the Champion Coated Paper Company, at Hamilton, Ohio, with paper machines only. Mr. Thomson,² who was the organizer of the Champion Coated Paper Company, found that he was buying his raw material from his competitors, and he thought that was a weak position strategically. At that time the paper industry was quite profitable. We have very fond memories of dividends of ten per cent a month and no federal taxes or state taxes to change the enjoyment.

But he wanted to make his Ohio mill self-contained as to pulp and, going on the theory that the paper makers had at that time, he had to have a supply of spruce. Sulphite pulp was the cornerstone on which papermaking was based and Mr. Thomson was looking for a supply of spruce timber with the shortest haul to the Ohio mill and that led him into western Carolina. At that time, you see, there were substantial areas of spruce along the tops of the Smokies and the Balsam Mountains. The spruce appears from elevations of 5,000 feet up to 6,500 feet, where we get a climate that is comparable to that of Canada. Our rainfall and the mild climate gave us splendid growth of spruce, so the spruce stands in the Smoky and Balsam Mountains were recognized as the finest in eastern America.

MAUNDER: Was the company drawing supplies of spruce from its competitors who owned and cut timber in the same area?

ROBERTSON: Well, we were buying pulp from the West Virginia Pulp and Paper Company who had spruce holdings in West Virginia, and also from the New York and Penn Company who had hemlock holdings in Pennsylvania.

1. Elwood L. Demmon, Asheville, North Carolina, U. S. Forest Service: retired director Southeastern Forest Experiment Station.

2. Peter G. Thomson.

We were buying pulp, not timber. We had no facilities for converting the timber into pulp at that time.

MAUNDER: In other words, you bought pulp and made it into paper.

ROBERTSON: We bought pulp on the open market and we bought some that was imported.

MAUNDER: From the Scandinavian countries?

ROBERTSON: From the Scandinavian countries.

MAUNDER: And from Canada, too?

ROBERTSON: Yes.

MAUNDER: Your company origins go back to the 1880s, as I recall.

ROBERTSON: No, about 1896 is when Champion was incorporated.

MAUNDER: There was no company that preceded it?

ROBERTSON: No. It was built entirely on Mr. Thomson's initiative. Mr. Thomson had been the owner of a bookstore in Cincinnati. He thought that he could make more money by producing the books, so he established a printing plant and a publishing plant in Cincinnati, and that gave him access to knowledge about paper. The Champion International Faper Company from near Holyoke, Massachusetts, had developed a new method of coating paper, permitting the wet coating to be applied on both sides of the sheet at one time, and they had a basic patent on it. Mr. Thomson got a license under that patent -- that's where the Champion name came in -- and it wasn't long until the "child" exceeded the "parent" in size and became the dominant factor in the field of coated paper, because of the patent rights. The business grew very rapidly. The first step was coating, then making the paper, then making the pulp to supply the papermaker's needs. That's how Champion got into Carolina. It was because these forested areas were the closest to the Hamilton, Ohio, plant.

The use of chestnut came about through another patent that was obtained by a fellow named Oma Carr. Oma is really an abbreviation of Omega. His parents decided that he was to be the last addition to the family so the name "Omega," the last letter of the Greek alphabet, was selected for him, and for business reasons he shortened it to Oma. He was a chemical

engineer and he had watched the extract plants in western Carolina and Virginia extracting tannin from the chestnut wood, and then burning the waste. They ground the chest-nut wood to practically a powder in order to accomplish the greatest extraction. He devised a plan by which the extraction could be completed without destroying the fiber from the paper-maker's standpoint. Well, his idea was that the extraction of the tanning material could be done in such a way as to pay for the wood; then the extracted chips were to go to the pulp mill, the soda pulp mill. You see, there were two mills involved, the sulphite mill and the soda mill, and the extracted chips were to go to the soda mill. The soda mill would then be in the enviable position of having wood for very low cost, by using this waste. It was one of those fine ideas that had been worked out in the laboratory, but not on a mill scale. I came down here on a fifty-day assignment, which turned out to be a fifty-year assignment. In 1907 they had just started the mill and they were struggling to make that laboratory plan into a workable, commercial operation. It took us about five years to really accomplish it. There were many years in which the sale of tanning materials paid for the wood, so that was Champion's most profitable enterprise.

MAUNDER: What were some of the real bugs in the problem?

ROBERTSON: Well, the first chipper that Mr. Carr designed -that was the key to it, and the patent was on the chip preparation. The chip was in the nature of a shaving. It was a very thin chip in order to permit the maximum extraction and he had a very special chipper -- instead of taking the billets "end on" it took them sidewise. And, of course, in order to make them feed into the chipper he had to have a power ram to push it against the face of the chipper, and he got his angle cut by swelling the face of the chipper. Well, that proved to be a very expensive way of preparing the chips and that very thin shaving didn't permit us to fill the digesters, so we got a very, very low yield from the digesters. We finally had to give up that method and go back to the more or less standard method of chipping wood with the billets fed in "end on." We departed from the strictly standard method by using a very much shorter chip.

MAUNDER: In other words, you got a curled chip?

ROBERTSON: Well, the first one was curled -- a very thin shaving -- and it was ideal for extraction and for pulping, but the trouble was the digester yield. The yield per cord wasn't affected as much as the digester yield. It was just like packing feathers into a container. We finally got going -- very profitably -- on this revised form of chip. Then it was in about 1920 that the blight appeared, was'nt it?

DEMMON: Along after the war, in North Carolina.

- ROBERTSON: Yes, it was somewhere around 1904 that the blight first appeared in New York City. It came in through one of the botanical gardens where they had a lot of imported chestnut trees. All the forest experts ignored it because it didn't seem to amount to anything, but pretty soon, with the aid of the birds and the winds, this fungus was distributed all over the country where the chestnut existed. And, of course, each tree that had become infected became a focus of infection for hundreds of other trees through the birds and so on, and before anything could be done about it, it had taken over the whole stand of chestnut in the southern Appalachians. And that was really the dominant tree, wasn't it?
- DEMMON: It made up a considerable part of the forest, sometimes more than half the volume.
- ROBERTSON: Well, we came into this territory for two reasons. The first was the spruce and the second was the enormous stand of chestnut. I saw many chestnut trees that were six and seven feet in diameter. They grew rapidly and the stand per acre was very high.
- MAUNDER: Did the company buy their stumpage or did they buy land with timber on it?
- ROBERTSON: In the case of spruce we bought the land; in the case of chestnut we were getting supplies from the open market, because an open market supply had already been established here by the tanners and by the manufacturers of tanning material.
- MAUNDER: Were there any competitors for chestnut chips in this area?

ROBERTSON: No.

MAUNDER: You were all by yourself in that particular area?

ROBERTSON: That's right. We had this basic patent on the conversion of chestnut into pulp. There was no patent applicable to the extraction of chestnut if they wanted to go to this sawdust preparation. The peculiar feature of our process was that we retained the fiber strength and still had a chip that could be extracted. And it worked out very well. We had international trade, really, on chestnut extract and also on chestnut pulp.

MAUNDER: You set up your plant, Mr. Robertson, where?

ROBERTSON: At Canton, North Carolina.

MAUNDER: And that began in 1908, is that right?

- ROBERTSON: The first operation I think was in April, 1908. /The construction work got started in 1907.
- MAUNDER: You celebrated your fiftieth anniversary last year?
- ROBERTSON: Yes.
- MAUNDER: Your development of the process and everything came right along just before World War I?

ROBERTSON: That's right.

- MAUNDER: In what ways, if any, did the war itself influence your operation?
- ROBERTSON: I don't recall that it affected our operations in any degree.
- MAUNDER: There was no stimulation of production at all as a result of war needs?
- ROBERTSON: No. The chestnut extract was needed for the manufacture of boots at that time, but there was no special pressure on our operations. . .
- MAUNDER: To up production substantially because of the war needs?

ROBERTSON: Because of the war, no.

MAUNDER: What about the war's effect upon your labor force, your problem of labor? ROBERTSON: Well, it didn't affect that seriously. During the second world war -- well, our labor policy has always been to encourage continuity of service and we had what they used to call the "old age bonus" by which a man's pay was increased automatically five per cent every five years, up to twenty-five years of service. So the worker always had something to look forward to whether he got advanced to foremanship or not. It added quite a few dollars to the payroll, but it gave us a stability of employment that was extremely valuable to us. During the war period when the turn-over in some of our neighboring plants was ten or fifteen per cent a month, ours was seven-tenths of one per cent, because the men had good wages and the assurance of continuity of employment a lot of them were wise enough to give up a temporary advantage for the long-term prospect that was good.

MAUNDER: That policy of the company dates back to what time? ROBERTSON: That dates back to about 1910, I think it was. MAUNDER: That was a very advanced policy for that day.

- ROBERTSON: It was initiated by Mr. Thomson himself and he was really way ahead of the procession in his attitude toward the working man. It paid dividends for the working man over the years and for the company, too, because we have loyalty which I don't think we would have gotten otherwise, and we were spared the expense of re-educating skilled workers every few months.
- MAUNDER: Tell us something more about the development of your industrial forestry program. After World War I was over, it wasn't very long before you employed Walter Damtoft, I believe, as the first industrial forester in the South.

ROBERTSON: Yes, that's right.

- MAUNDER: What led you to the making of that policy decision and the establishment of something that was again a brand new departure in the whole field?
- ROBERTSON: Well, it was primarily the thought of safe-guarding our capital expenditures here. We knew that when you spend several million dollars on a plant, you can't afford to write it off in a short period for lack of raw material, so that was one of the factors. And then Dr. Schenck was quite a friend of mine. I used to see a great deal of him

when he was here. After he had his battle with George Vanderbilt he didn't have any place to go with his school, and at that time we had a number of buildings up at what we called Sunburst. It's the Lake Logan area now, or just above that, on Pigeon River. We had a number of buildings that were built in the first place to house woods workers. We were going to get the spruce out of that area and we had built the little village of Sunburst which was supposed to be a model village. We had very nice little cottages and meeting places and things of that sort, and we weren't using them, because we were getting our, materials from other directions. But we invited Dr. Schenck to move his school up to Sunburst, which he did, and he carried on some of the early surveys for us. We began to think about the use of pine back in those days. We knew that the fiber was suitable, but we didn't know much about the supply. He took his forestry school and made a survey of the whole territory tributary to Canton.

MAUNDER: This was before Dr. Herty's² experiments?

ROBERTSON: Oh, yes, long before. We were making bleached kraft out of pine at least ten years before Dr. Herty started.

MAUNDER: Could you document that from your records?

ROBERTSON: Oh, yes.

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MAUNDER: That would be historically very valuable.

- ROBERTSON: For a long time they have credited Dr. Herty with making the first white paper out of pine. Well, it's correct to a certain degree. He was the first to make newsprint out of pine, white newsprint. And a lot of people don't realize that it's easier to make fine papers out of pine than it is to make newsprint. We were in active operation at least ten years before Dr. Herty got underway on his work. I took him through the plant myself and showed him our pine pulping operations. But you see, using an alkaline solution you dissolve the resinous matters before you bleach the pulp. Now, in making news-print you don't use bleached pulp, you rely on the natural color of the wood for the most part. It's unbleached pulp plus ground wood. And when you use pine ground wood you get all the resinous matters that are in the stick right on the paper sheet and it makes plenty of trouble. We didn't make that kind of paper at all, so he came along with this new process of converting pine into newsprint ten years after we had started making the bleached kraft for the finer papers. We hadn't worked with that at all and had no interest in it because our papers were all of the printing, the book grades.
- Carl Alwyn Schenck, German-born forester on George Vanderbilt's Biltmore Estate and founder of the Biltmore Forest School.
 Dr. Charles H. Herty.

DEMMON: That pine that you were mentioning, was that mostly white pine?

ROBERTSON: No, that was jack pine primarily. All of our earlier experiments were made with the local yellow or jack pine, such as Virginia pitch pine and shortleaf. We didn't use any, practically any, longleaf or loblolly in our early work.

DEMMON: They don't grow around here.

- ROBERTSON: No, we were drawing from the mountain section. It was Dr. Schenck who helped us to clarify our thinking about the use of pine.
- MAUNDER: Let us ask you a couple questions on that. Was it Schenck who came to you with the suggestion that local pine might be suitable for this purpose, or did you go to Dr. Schenck and say, "Will you make a survey to determine for us whether this is true?"
- ROBERTSON: The latter is right. After we established our friendly contact we asked him if he wouldn't like to make this survey for us, and he did. He took his whole Biltmore school and traveled the entire area tributary to Canton.
- MAUNDER: In what ways did you carry out the experiment? Were there actually some sample cooks made?
- ROBERTSON: Oh, we had made laboratory cooks in the mill. We were operating a soda mill, you see, using straight caustic soda as our solvent for chestnut. Then as we saw the possibilities of using pine, we allocated some of our soda mill to the cooking of pine. Our first pine was cooked not by the kraft process or the sulphate process, but by the soda process.

MAUNDER: Do you remember about what date that was?

- ROBERTSON: Well, Dammy is our historian. I think that was about 1915. / Somewhere around we've got those exact dates.
- MAUNDER: This gives me a good opportunity to demonstrate how important personal papers and company records are in documenting, not alone company history, but in this case something even broader, industry history. This is something of considerable historial importance to the whole pulp and paper industry, to the whole area of forestproduct industry history. You were making history.
- 1. Walter J. Damtoft, Asheville, North Carolina, retired as assistant secretary, Champion Paper and Fibre Company.

ROBERTSON: We had no idea of belittling the accomplishment of Dr. Herty. He solved a difficult problem. But it was quite a different problem from ours and there was confusion in the minds of a lot of people as to what was white paper. The newspaper account said that he was the first to make white paper. Well, he wasn't the first to make white paper out of pine. He was the first to make newsprint out of pine.

DEMMON: He talked mainly about newsprint.

- ROBERTSON: He talked it, but the public thought that he was the first one to use pine in paper making.
- MAUNDER: When you say the public, believe me, that involves an awful lot of people on a lot of different levels. Now, for example, here I am. I am an historian. Up until this trip my notions in regard to the history of pulp and paper making, were that Herty's experiments were indeed the beginning point. .
- ROBERTSON: Well, you'll find a number of our boys out at Canton who were in the midst of it, that have at times resented that statement. And Dammy, in some of his published talks, has referred to that. I know I have in some of the papers that I have written, without any idea of belittling Dr. Herty's accomplishment because it was a great accomplishment. We weren't particularly eager to get publicity on what we were doing. We were selfish on that.
- DEMMON: Actually, the Forest Products Laboratory at Madison had worked out some of these processes before Herty, but Herty was a great publicist and he could get the ear of the people.

ROBERTSON: That's right. Dr. Herty was a great promoter.

DEMMON: He certainly was.

MAUNDER: Yes, and Herty was motivated by something else, too, I think. Herty was a southerner who was imbued with a tremendous desire to raise the whole economy of the South. Now this gave a motivation which forced him out into the places where he sought publicity for his ideas and for the results that he got in his experiments.

ROBERTSON: Yes, I think that's right.

DEMMON: It resulted in a lot of good for the South.

- ROBERTSON: Oh, yes. There's no question about it. He gave national publicity to possibilities that big paper corporations could be good for the South.
- DEMMON: And also it was resented somewhat in the pulp and paper industry which was centered in the North. They were having some hard times with overproduction about then. . .
- ROBERTSON: It's kind of interesting to look back at some of his assurances when he was trying to get the pulp mills located in the South. I think I mentioned the fact that in those early releases of his he talked about pulpwood at \$3.50 a cord, delivered. We thought that he was overoptimistic about that.

DEMMON: Actually wood was very cheap in those days.

ROBERTSON: You could get it for that. Now, when the Canton plant started, the prevailing price for chestnut was \$3.50 delivered and the wage rates were seventy-five cents a day for a ten-hour day, and a good foreman got a dollar a day.

DEMMON: No minimum wage?

- ROBERTSON: No minimum wage. Those were the prevailing rates. Of course, it didn't last long, and that \$3.50 price on chestnut didn't last long. As soon as a real demand was established, you had to pay the real cost of getting it out. That \$3.50 was more or less an emergency price, a distress price, a give-away price.
- MAUNDER: Was there no demand for chestnut for any other uses than pulp? How about poles and ties, and things like that?
- ROBERTSON: Well, chestnut isn't very good for ties; it is good for poles, but most of the chestnut was beyond the pole size here. The biggest demand was from the tanneries and the extract plants that extracted the tannin material and concentrated it, and then shipped it all over. At one time our plant was the largest one anywhere in operation using chestnut. We supplied the bulk of the British requirements. British Tanners, Limited, was an aggregation of about twenty of the big tanneries in England and we supplied all their needs. They liked chestnut better than they did other materials. It fitted their formulas.

MAUNDER: Was this purely a by-product as far as you were concerned?

ROBERTSON: It was a by-product that we sold to tanners in the United States, in Canada, and in England.

MAUNDER: How important was it to you?

ROBERTSON: [Well, it was our most profitable operation.

DEMMON: It's where you made your money?

ROBERTSON: Yes, that's where we made our money. The sulphite mill was economically sound, but the other was the real profit maker.

MAUNDER: Tell me a little bit about how you established markets for your products.

ROBERTSON: The chestnut?

MAUNDER: Yes.

- ROBERTSON: Well, this chemist that we had, Oma Carr, had been in the extract business before he came with us, and he had been operating in plants where they made extract only. Then he got the idea of the double use. He served as sales manager and production manager, too, and he had already had these contacts.
- MAUNDER: In other words, it was just a matter of building on top of that?
- ROBERTSON: Yes. You see, the market for chestnut extract had long been established as a recognized industry. We weren't breaking into a new field in the selling of extract. The new feature was the making of the chips of such a character that they could serve both purposes. Then, of course, the blight came along and for over twenty years we continued to operate our plant on blighted chestnut.

DEMMON: Was the dead chestnut as good as green wood?

ROBERTSON: Well, there was a gradual lessening, not only of the tannin content, but of the fiber content. When we started here we got between eight and one-half and nine per cent of tannin from the chestnut wood. After twenty years of the blight it got down to five per cent and the pulp yield of sound green wood was about forty-five per cent. As we got into the more extensive use of the blighted wood the yield went down to about thirty-five to thirty-seven per cent. So we gradually tapered off, and, in the meantime, synthetic tannin materials came in and the price dropped. And in addition to that, we had to go further back into the mountains to get the chestnut, so we had a combination of unfavorable factors.

- MAUNDER: In other words, the diminishing supply of raw material was offset by the coming in of new synthetic processes?
- ROBERTSON: Well, as far as we were concerned, the timber was more remote. We had to pay more to get it out; the tannin content had dropped as well as the percentage of usable wood fiber, because there was a certain amount of decay. So we finally reached a point where it didn't pay any more to use chestnut. About five years ago we abandoned all of our chestnut operations and shifted over to the use of miscellaneous hardwoods, which gave a very much higher pulp yield. And when we made the shift we increased our profits rather than lessened them.
- MAUNDER: It was only five years ago that you gave up on chestnut?

ROBERTSON: That's right. About six years.

MAUNDER: Were you still harvesting dead trees?

- ROBERTSON: That's right. I don't think there has been any quantity of living chestnut here for ten or fifteen years, something like that.
- MAUNDER: In your forestry operations have you ever made any experiments in trying to re-establish the species?
- ROBERTSON: Yes, Dammy conducted a number of experiments for us with the Oriental chestnut (Chinese chestnut) that was supposed to be blight proof, out at our Willets operations. We have an area of about six thousand acres there. Dammy conducted those experiments for us and we planted chestnut, always hoping that we'd find some way of keeping it alive.

DEMMON: But you don't really need it now?

ROBERTSON: Don't need it now.

- MAUNDER: Other hardwood species have come in which are commercially chestnut's equal?
- ROBERTSON: Well, if we could restore that original balance by which the extracted material paid for the wood, chestnut would still be desirable.

DEMMON: But that will probably never come again?

- ROBERTSON: No, the native chestnut is gone. We tried planting Chinese chestnut in various locations, and if we planted it orchard-wise, like an apple orchard, the blight would hit it. But if we planted it forest-wise, mixed with other trees, the blight didn't hit it. But we have some pretty good plantations of the Chinese chestnut out there at Willets now, but this combination of lower price, the substitution of synthetic materials, and higher costs threw chestnut out the window.
- DEMMON: And your spruce had already gone out the window through the national park?
- ROBERTSON: That's right. So the actual production of bleached pine has been more profitable, after we once got settled down, than the spruce operations were.
- MAUNDER: But this was nothing you knew about at the time you were losing your spruce lands? You had no assurances at that time. . .
- ROBERTSON: No. We had made some experiments, but when we saw the prospect of losing our spruce then we speeded up our experiments and made these cooks by the soda process. But the soda process is a drastic process and it lessens the strength and the yield, both. The use of the kraft process buffers the action -- there is caustic in the liquor but it's buffered to the extent that it gives higher yield and much better strength.

MAUNDER: This loss of spruce, perhaps, in the long run was a good thing.

ROBERTSON: Yes.

- MAUNDER: Tell us a little bit about that period and your sentiments and your experiences.
- ROBERTSON: Well, you are familiar with the formation of the Great Smoky Mountain National Park, you are familiar with that organization? They decided that the finest body of spruce in eastern America was this body that I had spent ten years building up. I was the one that was entrusted with the job of building a good big area. . .

MAUNDER: Blocking up an area that was manageable?

ROBERTSON: That's right. And we got this hundred thousand acres on the crest of the Smokies -- half of it in Tennessee and half of it in North Carolina. And the Smoky Mountain group came to us and asked us if we didn't want to sell it. We said we didn't because it was the sole source of supply for our sulphite mill. Then they went ahead and got condemnation authority -- they established the right of eminent domain for the park commissions in North Carolina and in Tennessee. And the legislatures of the two states appropriated \$2,500,000 apiece, so that they had \$5,000,000 to work on. Then they came back and asked us to sell them the land. Well, we said, "What are we going to do with the sulphite mill?"

They said, "The sulphite mill is entirely dissociated from those lands, and that's your problem." Well, that was the essential difference in viewpoint between us. We recognized that it was a desirable thing from the standpoint of the community and of the states. But we had a duty to our stockholders to protect their investment. We had a very substantial investment in the sulphite mill. It didn't affect the soda mill at all because that was dependent on chestnut and chestnut wasn't affected by the Smoky Mountain Park Program.

So the first actual condemnation trial was over in Sevier County in Tennessee at Sevierville. They submitted the thing to one of those evaluation juries, you know. They had been offering us a million dollars, I think it was, for the whole outfit and this jury came in with a verdict of about three million just for the Tennessee side. And I think some of them wet their pants over it! But that was just the first step in the condemnation proceeding. You see, you had to have an evaluation by a "jury of view" they called it. I think it was five men.

MAUNDER: And representatives, legal representatives, of both sides testified.

ROBERTSON: That's right. While the jury of view had no final say-so, it was an appraisal really.

MAUNDER: Who did you bring in as witnesses before this group to explain your feelings regarding the valuation?

ROBERTSON: Well, of course, we brought in foresters -- people believe in foresters sometimes!

MAUNDER: Who were some of the foresters you brought in?

ROBERTSON: I can't remember them now. Dammy can tell you. Dammy was right with us all through that and he kept a diary and he can tell you. He was one himself, and Charlie Smith was our wood procurement man. They had all travelled around a good deal and knew values, knew what the stumpage was worth. The Park Commission had one fellow named Statler, wasn't it? He was one of the prominent foresters of Canada and he operated a sulphite mill up in Canada. Of course, their logging methods were wholly different from what they are here. They float the streams; we don't float at all. In the Smoky Mountain area we had built a narrow-gauge railroad clear up to the 5,000 foot contour. We had laid out contours for railroad operations. [Well, this fellow Statler was taken up there in mid-winter when it's pretty rough and he came back with the report that the lands were worthless that they couldn't be operated economically by anybody.

There was quite a difference in viewpoint between some of the experts. Several of them came there and said that the lands were completely inoperable, but we had been operating them to our own satisfaction. With these logging railroads we had overhead skidders and all of the mechanical equipment necessary to operate in rugged country. That was rugged country!

MAUNDER: Did you offer then in testimony your own records of operation?

- ROBERTSON: Oh, yes. All of that appeared and this jury of view took our view of it. They were mountain men that knew something of the values there. These other fellows from Canada and various other parts of the United States just hadn't faced that problem.
- MAUNDER: Were these other men from other parts of the country brought in to testify on the government's side?
- ROBERTSON: Yes, that's right. This first trial was in Sevier County in Sevierville, Tennessee, and lasted just about two months with that jury of view. We had the Mountain View Inn rented and occupied practically the whole hotel with our witnesses and our legal staff.
- DEMMON: How long a period of time did it take to settle that controversy?
- ROBERTSON: Well, I think the negotiations lasted two or three years.

MAUNDER: That was about what time, Mr. Robertson?

ROBERTSON: From about 1926 to 1930. /Dammy has the exact time on that. I've kept files clear back to 1907 on these things and Dammy has, as long as he's been with us, since 1920, so that we've got letters and things that refresh our memory. . . .) MAUNDER: Mr. Robertson, let me ask you something. Have you given any consideration in the company to the establishment of those records in some permanent repository, so that they may be a permanent source of historical information?

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- ROBERTSON: No. We've talked some of summarizing that while Dammy and I are still above ground.
- MAUNDER: That's fine if you will do that, but don't let the summary from memory that you men will make serve as a substitute for the original records themselves. These are the documents which the historians who are writing southern history, American history, and business history and forestry history, will require to really authenticate the stories.
- ROBERTSON: Well, we submitted all of our files to this Smoky Mountain jury -- the files that I had and the files that Dammy had.

MAUNDER: But you have retained possession of them?

- ROBERTSON: Oh, we kept possession of them. Dammy has them at his house now, I think, but I'm not sure.
- MAUNDER: Well, what I was getting at here, Mr. Robertson, is this: We are very much concerned about this matter of preserving sources because as American industry has grown to a point of maturity, it becomes more and more necessary to establish for that industry a verified, accurate, documented history of itself. This is at the foundation of whatever is being done to educate the community as a whole to the role which industry has played in history. Now, we need to get companies like yours to take this matter very seriously and establish these records, perhaps in a fine company archives that is directly under the company's control with a person at the head who knows what archival methods are and knows how to sift the wheat from the chaff. Ninety-five per cent of most corporate records are of very little historical value, but that remaining five per cent is important and it requires the attention of someone who has real training in archival methods to ascertain what is wheat and what is chaff.
- ROBERTSON: Well, no one of that training and capacity has ever gone over our records. This fellow from Knoxville is not an archives specialist, he's just trying to get an interesting history of the background of the national park. But what we've got, of course, is available for anybody for examination.

- MAUNDER: What we are trying to get around to doing, Mr. Robertson, is to get the really first-rank people in the field of historical research and writing interested in looking at the history of the forest products industries and of the profession of forestry. Well, one can only do this as he is able to say to these outstanding writers and scholars, "The records that document this story are available for your reference." So we are very anxious to get many of the important companies especially, to take steps to establish a fine archives of their own; or if they have no inclination to do this within their own corporation, then we try to get them to turn the old records (let's say that pre-date a certain year and are no longer of any important reference value to the company) over to a university.
- ROBERTSON: Well, I know that we have considered Duke or State College.

DEMMON: North Carolina State College?

- MAUNDER: North Carolina State College -- we've worked very closely with them and with Duke. We also work very closely with Miami University up in Ohio. As a matter of fact, we have recently convinced the provost and the president there, and the dean of the graduate school, that Miami University ought to become a research center for the study of the industry of the whole Miami Valley.
- ROBERTSON: Dammy and I will see what we can find there. He's our historian. Dammy has always been very careful to keep up his diary. It's been very valuable to us, too, over the years.
- MAUNDER: Well, you know that's one of the things about these Forest Service men, they all started out having to keep diaries. Dammy started out that way and he has kept it all through the years. 7 Now, could we go back just a little bit to the Dr. Schenck period? You got to know Dr. Schenck when he was operating over here at Biltmore?
- ROBERTSON: That's right. He was the forester for the Vanderbilt estate, when I first knew him, and that was about 1907. I think he had been here five or six years at that time.

MAUNDER: Since 1896.

DEMMON: 1898 is when he started the school.

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ROBERTSON: One of the mementos that the school left is that song, "Down Under the Hill," which we still sing.

DEMMON: Dr. Schenck was a great character.

ROBERTSON: Wasn't he though!

MAUNDER: You knew him as a personal friend, Mr. Robertson. Can you give us a thumbnail sketch of the man as you knew him?

ROBERTSON: Well, when he first came here he was a little inclined to be autocratic, I think. He had been raised in the military atmosphere in Germany and he didn't get along well with our people here, because he believed in giving orders and not giving any reason for them. He had quite a bit of trouble with the mountain folks on the estate. I think they burned him out a few times and he didn't think so much of them.

MAUNDER: And he'd tell them so, I suppose?

- ROBERTSON: And he told them so. His discipline with his students was pretty sharp, but they all liked him because he was so fair. I've never seen a greater loyalty to the founder of any school then exists in that Biltmore Forest School group. It is based on a great admiration for his knowledge and for his personality. Essentially he was a very friendly fellow, but these mountain people didn't understand him. He had retained his German citizenship and when they got into war he was called back, and while he was very friendly to his American friends, he was under orders. I think he was wounded. Then he came back here again.
- MAUNDER: Did you maintain contact with him all through the years and exchange correspondence?
- ROBERTSON: Yes. We had letters from him when he was in Germany. We were surprised at the character of some of the letters that came to us from him in Germany in which he described his hardships, the hardships of the people. When he came back the second time, he had become a member of the Quakers. Prior to that time he was pretty much of an agnostic, and he was quite a philosopher -- he had the philosophic approach to a lot of things. He was really a brilliant man.

MAUNDER: Was this after World War I?

ROBERTSON: Yes. It softened him a great deal. My son, Reuben, Jr., spent three or four months with him in the Black Forest.

DEMMON: That must have been a great education.

ROBERTSON: It was. You remember, there was a time when he took groups of young foresters from this country on personally conducted tours through the Black Forest to show the progress in German forestry, and Reuben was in one of those groups. Let's see, wasn't it Hofmann that was at North Caroline State College? Well, he was on one of those trips; I think that's where Reuben got to know him, on one of those trips that Dr. Schenck conducted.

MAUNDER: Your son went to North Carolina?

ROBERTSON: No, he graduated from Yale.

MAUNDER: What was your own background? Was it in forestry?

ROBERTSON: No, I graduated from Yale with a Bachelor of Arts degree, with no expectation of going into forestry at all. My father was a lawyer in Cincinnati and he counted on me to pick up his practice, and go on with it. I took the law course at the University of Cincinnati, and became a lawyer and was admitted to the bar. Later I married Mr. Thomson's daughter and then business got into a terrible mess in 1907, when the bottom dropped out of everything. They were all busy up there and this mill here at Canton was half finished, but not financed. They doubled their capacity up at Hamilton without financing, expecting to pay it out of that ten per cent a month dividends. And when dividends didn't come we were in a hell of a fix, they were needing help and they asked me if I wouldn't come down here to North Carolina and see if I could straighten out the mess that prevailed. So my first assignment was to last not more than fifty days.

MAUNDER: You looked upon it purely as a temporary thing?

- ROBERTSON: Yes, I was going back into practicing law, and then I got so involved that I couldn't get out, and my father released me from my expectations and obligations, really, to go into his office.
- Julius V. Hofmann, director, Division of Forestry, North Carolina State College.

MAUNDER: Then you came to live here in Asheville?

- ROBERTSON: No, we first went to Waynesville and lived there part of the time. Then we went to Lake Logan -- to Sunburst, as it was called then -- where the forestry school was located.
- DEMMON: Mr. Robertson became such a good scientist and forester, though, that North Carolina State College conferred upon him the degree of Doctor of Science. So, although he may have started out as a lawyer, he became an expert in many other things.
- ROBERTSON: Well, it all relates back to that first trip I was talking about.
- MAUNDER: Well, now, Mr. Robertson, you must have seen something of the development of the Southern Conservation Congress, then, or the Southern Forestry Congress?

ROBERTSON: Yes.

MAUNDER: It started in 1916?

- DEMMON: They held their first meeting right here in Asheville in 1916, do you remember that?
- ROBERTSON: I was there, I know, but I don't remember the details.
- DEMMON: That was the year they had the big flood, and Asheville was marooned for several weeks.
- ROBERTSON: I was up in Cincinnati when that happened and we got into Asheville by way of Murphy. Couldn't get in up the French Broad river valley at all.
- DEMMON: The railroads were all washed out here, right after that Congress.
- MAUNDER: Your whole development here in this part of the South came at least ten or fifteen years ahead of the vast development of the pulp and paper industry in the South?

ROBERTSON: That's right.

DEMMON: More than that, probably twenty-five years.

MAUNDER: Well, it came in the thirties, didn't it?

DEMMON: But Champion started here in 1908.

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MAUNDER: Yes, but their big development here really came some years later.

- ROBERTSON: It was a matter of steady growth with us. Looking back over the record and taking five-year periods, there has never been a single five-year period in which our sales and production were not in excess of the preceding five years. It's been a steady growth. And the property account has risen because of plowing back of earnings. We paid for most of the things that we put in through earnings. We have not used the merger method at all.
- DEMMON: You did expand though, into Texas, along in the thirties.
- ROBERTSON: Yes, that's right. That Pasadena mill has been there twenty-five years now.
- DEMMON: That's when I was in New Orleans and I remember I helped Charlie Smith and Damtoft and others in some of the forest inventory background for the Texas development.
- ROBERTSON: At that time we had come to the conclusion that we would get a better and more permanent supply of the essentials of kraft paper and pulp making down there. You see, we were looking for a forest area where the growth would exceed the drain by a very substantial amount and the east Texas area at that time was outstanding in that regard.

DEMMON: And there were no other mills there?

ROBERTSON: There were no other mills there. We had a location formula in which we had certain items. We wanted to get natural gas for fuel (get away from the clutches of John L. Lewis); we wanted a forest area where the growth exceeded the drain; we wanted a place where we could get salt cheaper. Salt is one of the commodities in making bleach and so forth. We had been buying salt in Michigan and up in Syracuse, New York. Down at Houston we were sitting within fifteen miles of a salt dome.

DEMMON: Sulphur, also.

ROBERTSON: Well, we don't get any sulphur down there. We didn't need sulphur for the kraft process. But in this salt dome we have enough to take care of us for 150 years. I figured Reuben and his children could worry beyond that. And then we wanted a source of lime. For this Carolina plant we get our lime from the waste of the marble quarries over in east Tennessee. Down there, in Galveston Bay, there are enormous deposits of oyster shells and they have dredges there that dig them up and wash them and then deliver them right to our plant at very much less than their cost here. Then we wanted an outlet for caustic. We didn't use all the caustic that we made in our electrolytic plant. Several big refineries are in Texas, right alongside of us on the ship channel, and we sold them caustic for the neutralization of their sour oils, sour oils carrying sulphuric acid. They had to get it out of their crude. So we sold them caustic to get rid of the sulphuric acid; the by-product of that was sodium sulphate, which is exactly what we wanted in our process, so it balanced out very well.

We covered all of the eastern United States and the West Coast with that location formula. We rated the location with reference to an evaluation of each of these items: excess of forest growth over drain, the availability of salt, the availability of lime, the access to the market for caustic, and then access to Ohio by water transportation. That was another factor. You see, we were on the inland waterway there and we wanted low freight rates.

MAUNDER: To ship your pulp up by barge?

- ROBERTSON: Yes. So that was the only place that gave us one hundred per cent on our peculiar formula. Now, that formula wouldn't please everybody because every paper mill or pulp mill has a different combination.
- MAUNDER: How did you get your sights on different locations? Was this a matter of actual field-scouting experiment?

ROBERTSON: That's right.

MAUNDER: Done by whom?

ROBERTSON: Dammy and Charlie Smith were our scouts.

- DEMMON: They used the findings of the Forest Survey, which were coming along just about that time, indicating how much timber there was in east Texas, and how rapidly it was growing.
- ROBERTSON: A lot of people said, when they heard we were going to Texas, "Why, you're crazy. There's no timber out in Texas, it's nothing but prairies and rice fields and oil refineries and things of that sort." A lot of

people had never heard of the "Big Thicket," you see, and the tremendous areas of good, fast-growing pine. Another factor there was the rate of growth.

MAUNDER: That brings up an interesting sidelight. The knowledge of this timberland and its fast-growing capacity, was in a sense, a fact made known to the public by the surveys of the Forest Service, right?

ROBERTSON: That's right. That was based on published data.

- MAUNDER: And this then, was a contributing factor, was it not, in developing the industry there?
- ROBERTSON: Well, now, we looked at areas in Alabama. At one time we looked pretty seriously at Mobile and then we looked pretty seriously at Tuscaloosa. At Tuscaloosa and at Mobile we could get coal fuel. We use about a thousand tons of coal a day at Canton and that's an important factor with us. So we were looking for the cheapest possible fuel. At Tuscaloosa the mines were right on the Warrior River within a few miles of the plant. And then we took a serious look at Mobile, but when we got to the final comparison, Texas was best, because of the natural gas, the large areas of timber, the oyster-shell situation, and the market situation. All those factors entered into it.

MAUNDER: Did you buy cut-over lands down there?

ROBERTSON: Yes, we did.

MAUNDER: From whom did you buy most of it?

ROBERTSON: Well, we bought not only cut-over lands, but we got virgin lands, too. At the outset, when we started buying lands there, we wouldn't buy anything unless all the mineral rights were included. We bought, oh, I think it was sixty or seventy thousand acres or more, with all of the mineral rights included. Of course, later on the mineral rights were of sufficient value to pay for the stumpage, so that stumpage cost us nothing. But pretty soon the values rose sharply there, and people wouldn't sell the oil rights. So with our later purchases (we have about 300,000 acres in Texas now) no mineral rights could be acquired.

MAUNDER: All in Texas? No overlapping into Louisiana or Oklahoma?

ROBERTSON: No, it's all in Texas -- all tributary to the Pasadena plant and mostly on the Trinity River -- partly on the Trinity River and partly on the San Jacinto.

- MAUNDER: To what extent do you depend upon sources other than you own lands to supply your needs there?
- ROBERTSON: Well, we are cutting on our own lands only for forest improvement.

DEMMON: You draw from the national forests, also?

ROBERTSON: Yes. We buy wood both from the farmer down there and from the national forests. Here in this North Carolina section we do the same thing. We are not cutting extensively on our own lands as yet.

MAUNDER: You are building your own lands up, in other words?

- ROBERTSON: That's right. We are trying to build them to the highest value. You see, while the lands that we have bought in this area in South Carolina -- most of the lands tributary to the Canton mill are over on the South Carolina side -- very often we would buy lands that had good forest reproduction on them, but nothing ready for immediate harvest. In many of those areas there were more trees than needed and the forest could be improved by thinning.
- DEMMON: I recall the time when the company started out in Texas. The Southern Forest Experiment Station, of which I was director, then had no research work underway in Texas, and we discussed the possibility of putting in a research field center to determine the best methods of managing that land for timber production, including pulpwood.

ROBERTSON: That's right.

DEMMON: And we did that on a cooperative basis.

- ROBERTSON: Well, the Forest Service was extremely helpful to us over there and in South Carolina, too.
- MAUNDER: This is interesting to me as an historian, because I think in the public's mind even today there is this notion of two antagonists -- the forest-related businessman on one side and the federal Forest Service man on the other -still in conflict with one another. Yet there has been over recent years a gradual bridging of the chasm of dissension between the two groups. I'd like you, if you would

gentlemen, to go into that a little bit, to see if you can't find a few bench marks in that story which mark the gradual change from a point of antagonism to one of harmonious working together.

- DEMMON: Well, I don't recall that there ever was much antagonism on the part of industry to federal forest research developments.
- ROBERTSON: No, I don' think there ever was. I think there has been antagonism to the building up of large federal forest areas into units that are big enough to justify a management plan. It's only just a few years ago down in South Carolina...you see, they had a law that limited the amount that a foreign corporation could buy there. I think it was 5,000 acres, wasn't it?

DEMMON: Something like that.

ROBERTSON: They were afraid of concentrated wealth.

DEMMON: It was the local and state government that was afraid.

- ROBERTSON: Yes. Well, it prevailed pretty much through the state there. They didn't want to get these large forest areas removed from immediate use, from the peckerwood mill operators, for instance. They have always been against the forestry plan.
- MAUNDER: Tell me, Mr. Robertson, you had training in the law; would you say that the excesses of the nineteenth century rugged individualist laisse-faire capitalistic development in this country gave any justification for these fears on the part of state and local governments?
- ROBERTSON: Well, I think originally the lumbermen would "get in and get out." They didn't take any steps to guard against the burning of the forest, or protecting young growth; they just got what they could out of it and went on. Of course, we have to remember that profits in the early days of the lumber operations sometimes were very limited and they couldn't spend very much on protecting the property.
- DEMMON: They couldn't foresee the forestry possibilities of the future.

- ROBERTSON: No, they thought that by <u>mining</u> the forest area they were getting the greatest value out of it. It took a long time for them to realize that those forest areas could be farmed for perpetual yield.
- MAUNDER: But regardless of the economic conditions which caused them to operate as they did, still the economic and social results of their operations did leave a mark upon public opinion that has been a long time healing.
- ROBERTSON: Yes, I think there has been a feeling that the big corporation was ruthless. But today the big corporation's interest is in the direction of permanency of supply.

MAUNDER: Stabilizing of the economy?

- ROBERTSON: That's right. Most pulp and paper mills today -well, they all call for the expenditures of a lot of capital -- thirty, forty, sixty million dollars -- and very often it has to be financed. Well, when you get with the Wall Street banker he wants to know what the chances of survival are for a company investing that much money. How permanent is the raw material supply? So in order to properly finance many of these new jobs, they have to spend money on forests and they have to see that those forests are operated on a management plan, a sustainedyield basis. The financing feature has entered in, don't you think so?
- DEMMON: Yes. Not only on the company's own land, but also the need to support forestry in the whole general area.
- ROBERTSON: Many years ago, in our contracts with the small farmer, we put in a clause that we could cancel the contract if he was not handling his wood lot in accordance with sustained yield principles. We seldom had to do it, but we provided field men to help in marking the trees for cutting.

DEMMON: It was an educational measure.

MAUNDER: Tell me, did this policy on the part of your company precede the concept and the advocacy of that idea through such agencies as the Southern Pulpwood Conservation Association?

ROBERTSON: Yes, that came along later.

MAUNDER: In other words, some of the ideas that you developed were taken over by this agency and given wider application?

- ROBERTSON: Yes. We were almost the only big operator for a number of years in the South, and we were developing our own forestry policies through Dammy.
- MAUNDER: To what extent then, were you instrumental in getting this Southern Pulpwood Conservation Association organized?
- ROBERTSON: I don't remember who took the initiative there, but Dammy and Charlie Smith both cooperated enthusiastically. I just can't remember now which -- or what individual took the initiative.
- DEMMON: I don't think it was any one individual. I think it was industry pretty much as a whole.
- ROBERTSON: As the industry grew there were more and more people interested in the permanence of the wood supply.
- DEMMON: And it followed some of the criticisms that were levelled at industry for some of the heavy cutting.
- ROBERTSON: Well, I think that fire prevention was one of the educational features that was very important. And, of course, that was handled and supplemented and encouraged in every way by the federal Forest Service and the states, too.
- MAUNDER: To what extent had your company developed a plan of fire control of its own prior to the coming of the Clarke-McNary Act and some of the state fire-control programs?
- ROBERTSON: Well, at that time we didn't own very much in the way of timberlands. You see, the chestnut was abundant and we didn't consider it necessary to own great areas. But we cooperated in the educational work in keeping fire down.

DEMMON: Was the fire problem very serious in the mountains?

ROBERTSON: Yes, it was troublesome. You see, they burned the woods to improve the range. And down in South Carolina they burned the woods in order to get rid of the boll weevil and the snakes. There were three incentives there: they wanted to improve the range, they wanted to get rid of the boll weevil, and they wanted to get rid of the snakes.

DEMMON: They wanted to keep the country open for hunting.

ROBERTSON: That's right. And you know, quite often we'd find resistance on the part of the hunters. They want to be able to range freely over the woodlands. MAUNDER: You've been active, Mr. Robertson, through the years in trade association work, too.

- ROBERTSON: Well, I was active in the American Paper and Pulp Association.
- MAUNDER: What would you have to say about the part that the trade associations have played in this whole story? How important have they been?
- ROBERTSON: Well, the American Paper and Pulp Association, I think, was one of the early organizations to establish a forestry division in which they gave support to modern forestry methods.

DEMMON: The secretary was often a forester.

- ROBERTSON: Yes. You take Boyce and Tinker, they were both foresters and both gave enthusiastic support.
- MAUNDER: Would you say that the pulp and paper industry was the main force for the pressing of the forestry idea?
- ROBERTSON: I think so. Of course, you take the Great Southern Lumber Company at Bogalusa, Louisiana; they were pioneers as lumbermen in forestry.
- MAUNDER: And Henry Hardtner³at Urania, Louisiana?
- ROBERTSON: Yes, I used to visit both of them. I knew Sullivan there at Great Southern and I knew Henry Hardtner.
- DEMMON: But the pulp companies, when they started acquiring land, had to practice forestry. Along in the thirties when these big holdings were being acquired by the pulp companies in the South, forestry came as a matter of course.

That's right. ROBERTSON:

MAUNDER: It wasn't until the thirties that you began to build up large holdings of land?

ROBERTSON: That's right.

- Charles W. Boyce, executive secretary, American Paper and Pulp Association, 1929-1939.
- Earl W. Tinker, executive secretary, American Paper and Pulp Association, 1940-1957. 2.
- Henry Hardtner, president, Urania Lumber Company. W. H. Sullivan, general manager, The Great Southern Lumber Company.

DEMMON: And Champion is one of the pioneers, of course, in the South, if not the pioneer. That was long before International Paper Company and others came on the scene.

ROBERTSON: Yes.

- MAUNDER: What was the effect of the New Deal period on the course of forestry in the South and the forest industries? Here was a great depression, emergency legislation, and the C.C.C., and Article X of the N.R.A. code, and all these things. They had some influence, of course, in all of this, didn't they?
- ROBERTSON: Well, we used a lot of the W.P.A. workers in improving the forest areas.

DEMMON: And the C.C.C.

ROBERTSON: The three-C camps were used for conservation purposes and they were helpful.

MAUNDER: They got some good work done?

- ROBERTSON: Well, it was inefficient, but nevertheless it was in the right direction, and it was worthwhile.
- MAUNDER: Do you think it had any influence at all in educating a great number of men to a knowledge of forestry needs that hadn't probably known about them before?
- ROBERTSON: Well, I think it has. Don't you think it had some educational value?

DEMMON: Undoubtedly.

- ROBERTSON: That's a pretty hard thing to measure, but there were a lot of fellows that got a better knowledge of forest operations than they had before.
- DEMMON: It put people to work who otherwise would have just been on relief.
- ROBERTSON: That's right. And it gave a lot of people familiarity with the long-range view of forest operations.
- MAUNDER: Well, we've been talking a lot about the past, Mr. Robertson. How do you see the next fifty or sixty years of forestry in this country? Is it going to be a continuing stepladder, up, up, or what do you anticipate?

- ROBERTSON: Well, I don't see any prospect of any great change in the plans that are already underway. They are thinking in terms of sustained yield and permanent timber supply. Once in a while we get over-enthusiastic and build more mills than we ought to, and if we continue that, we could get to the point where we were cutting more than the annual growth, which is something that is very undesirable.
- DEMMON: But the market for paper, as the population increases, we know is going to make more demands on the forest than at present.
- ROBERTSON: I think the concept that the forests should be maintained for perpetual yield is very generally accepted throughout the Southeast now, don't you think so?

DEMMON: Yes.

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