An Interview

with REUBEN B. ROBERTSON

TRAILBLAZING IN THE SOUTHERN PAPER INDUSTRY

By Elwood R. Maunder and Elwood L. Demmon

Reuben B. Robertson is a name well-known and highly respected in the paper and pulp industry. During more than half a century of leadership in the management of The Champion Paper and Fibre Company of Hamilton, Ohio, and as a member of numerous associations of the wood-using industries, Mr. Robertson has played an important role in a segment of our nation's economic history.

He was recognized for his outstanding work in developing the economy of the southern states when he was named Man of the South in 1950. A lawyer by training at Yale and the University of Cincinnati, he first became involved in the management of Champion in 1907 and has served that company as both president and chairman of the Board. Now, at 81, he continues to take active part in business affairs and maintains an office in Asheville, N. C.

The following oral history interview was made on February 15, 1959, by Elwood R. Maunder, director of the Forest History Society, and Elwood L. Demmon, former president of the Society of American Foresters and retired former head of the Southeast Experiment Station of the United States Forest Service.

MAUNDER: Mr. Robertson, perhaps you can tell us a little bit about how Champion Paper and Fibre Company got into the pulp and paper business.

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. Peter G. Thomson, 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 percent a month and no federal taxes or state taxes to change the enjoyment.

He wanted to make his Ohio mill self-contained as to pulp and, going on the theory that the papermakers 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. That led him into western Carolina. At that time 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: 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. We were buying pulp, not timber. We had no facilities for converting the timber into pulp at that time.

MAUNDER: Your company goes back in its origin to the last century?

ROBERTSON: Champion was incorporated about 1896. 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 Paper 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 there 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 chestnut 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 papermaker’s standpoint. 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 forest maker’s standpoint. 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 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 problems of production?

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. 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 chopping 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: 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 in about 1920 the blight appeared. 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: 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: Tell us something 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 a new departure in your industry?

ROBERTSON: It was primarily the thought of safeguarding 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. Carl A. 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. Charles H. Herty's experiments?

Robertson: Yes, long before. We were making bleached Kraft out of pine at least ten years before Dr. Herty started. For a long time Dr. Herty has been credited with making the first white paper out of pine. This is correct to a certain degree. He was the first to make newsprint out of pine, white newsprint. Many 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. Using an alkaline solution you dissolve the resinous matters before you bleach the pulp. Now, in making newsprint 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.

Demmon: 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. We were drawing from the mountain section. It was Dr. Schenck who helped us to clarify our thinking about the use of pine.
seventy-five cents a day for a ten-hour day, and a good foreman got a dollar a day.

DEMNON: 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: 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 of 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: It was our most profitable operation.

DEMNON: 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. 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?

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 cooks by soda process. But the soda process is a drastic process and it lessens both the strength and the yield. 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. Tell us a little bit about that period and your sentiments and your experiences.

ROBERTSON: 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.

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. 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.” That was the essential difference in viewpoint between us. We recognized that it was a desirable thing from the viewpoint 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 of both sides testified?

ROBERTSON: That’s right. 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?

ROBERTSON: We brought in foresters—people believe in foresters sometimes! They had all traveled around a good deal and knew values, knew what the stumpage was worth.

The Park Commission had one fellow named Statler. 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. 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: I think the negotiations lasted two or three years, from about 1926 to 1930.

MAUNDER: Was your training 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.

MAUNDER: Champion's development came ten or fifteen years ahead of that of the industry in the South?

ROBERTSON: That's right. 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. We had been buying salt in Michigan and in Syracuse, New York. Down at Houston we were sitting within fifteen miles of a salt dome.

DEMMON: Sulphur, also.

ROBERTSON: 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. 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: How did you get your sights on different locations?

ROBERTSON: Damtoft 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 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 the 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 these?

ROBERTSON: 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 sixty or seventy thousand acres 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 your own lands to supply your needs there?

ROBERTSON: 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. And we did that on a cooperative basis.

ROBERTSON: The Forest Service was extremely helpful to us over there and in South Carolina, too.

MAUNDER: This is interesting 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: I don't recall that there ever was much antagonism on the part of industry to federal forest research developments.

ROBERTSON: No, I don't 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 governments that were afraid.

ROBERTSON: Yes. 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, laissez-faire, capitalistic development in this country gave any justification for these fears on the part of state and local governments?

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. 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 sustained yield basis. The financing feature has entered in, don't you think?

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: 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: How do you see the next fifty or sixty years of forestry in this country?

ROBERTSON: I don't see any prospect of any great change in the plans that are already underway. I think the concept that the forests should be maintained for perpetual yield is very generally accepted throughout the Southeast now.