

YOUNGSTOWN STATE UNIVERSITY

ORAL HISTORY PROGRAM

Niles Fire Brick Company Project

Personal Experience

O.H. 1607

RAYMOND J. WRIGHT

Interviewed

by

James Allgren

on

February 18, 1994

RAYMOND J. WRIGHT

Raymond J. Wright was born July 5, 1912 in Warren, Ohio, the son of John and Adeline Wright. Mr. Wright graduated from Warren Harding High School in 1930, and was hired in 1938 as a bookkeeper for the Niles Fire Brick Company, manufacturer of industrial refractory brick linings for industrial plants. He remained with that company until his retirement in 1975, by which time he had become the corporation eastern area controller. Mr. Wright is a World War II veteran of the Army Air Corps, having served from August 1942 through 1946. He and his wife Pauline were married after his discharge from the service, and they parented two daughters, Joyce and JoAnne. Mr. Wright received a bachelor's degree in business administration from Youngstown State University in 1964. He is an active member of the United Church of Christ, and also belongs to a variety of local Masonic lodges.

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INTERVIEWEE: RAYMOND J. WRIGHT

INTERVIEWER: James Allgren

SUBJECT: The Niles Fire Brick Company, the owners, the people who worked there, accounting practices, who bought the company, the types of brick made

DATE: February 18, 1994

A: This is an interview with Raymond Wright for the Youngstown State University Oral History Program, on the Niles Fire Brick Company, by Jim Allgren, on February 18, 1994, at 3:00 p.m.

You say that you started at the Fire Brick on September 15, 1938?

W: Yes.

A: As a cost accountant?

W: Yes, a cost accountant.

A: What is that job all about?

W: Well, the job was determining the cost of the products that were manufactured at the plant. We had to set up a cost system where we had to come up with mostly financial statements, balance sheets, whatever.

A: And you said, they didn't have a system in place for that before you came along?

W: No, there was no system in place.

A: What attracted you to the job? How did you come by the job?

W: I came by the job because a man by the name of Mr. Gilbert was the office manager, and he died. The family told me to go down and apply for a job with the Niles Fire Brick Company. It had an excellent reputation for continuity of service and fairness. I went down there, had an interview, and was hired immediately, put on the payroll.

A: You had heard of the reputation of the place. You said it had an excellent reputation of continuity and such. Did it meet your expectations? What were your first impressions?

W: My first impressions were good.

A: The office manager was Mr. Gilbert until he died. You were hired. . . ?

W: After his death, yes, on September 15, 1938.

A: Okay. Who was the office manager--who replaced Mr. Gilbert?

W: John Higgins.

A: Do you have any recollections of Mr. Higgins? What kind of office did he run? Did he run a tight ship?

W: Yes he did. He ran a tight ship. He had the confidence of the Clingan, Waddel, Thomas family. Of course, an English name helped a lot, you know. [Laughter]

A: Undoubtedly.

W: But, he treated me fair all his life.

A: At the time you were hired, how big was the operation at the plant?

W: Employee-wise?

A: Employee-wise and production-wise.

W: I would say it was close to its maximum. I think they had at least 200 people working, hourly people. In the office, we had maybe 20 people. Here's a strange little

addition that you might put in your history of the Niles Fire Brick.

During World War I, they used to use women for loading brick at the plant. They couldn't get men. They used women.

A: Everybody else was off in France.

W: Yeah, that's right.

A: As far as that goes with the employees, what were the relations like between management and employees?

W: Very good. [They were] very good. One thing that stands out in my mind is when economic conditions turned down--as they do in the cycles, you know--the Clingan family, Thomas family would not lay off people. They would take that time to repair the necessary things in the plant, you know, repaint and refurbish, do what was necessary to get ready for the production surge when it came after the economic downturn. So there was not too many lay-offs.

A: They were actually going out of their way to protect their employees. If there wasn't work, they would find work.

W: Well, they found work for them, but it wasn't busy work. It was work that was needed. The painting, maintenance, and this and that, replacing parts that were worn out of the presses and so forth. They kept everybody busy.

A: What about the union?

W: The management fought against the union. Ultimately, you couldn't do anything about it. We finally gave in to the union. Most management at that time did not like unions. They didn't like people dictating how many hours of work and so much wages, so they did not like that part of it.

A: We've had some conflicting information about when the union actually got in with the plant. We've got written sources and records that tell us it was 1937, and we've got some oral counselor telling us that the union doesn't come in until the 1940s.

W: I think it was the 1940s. It was the 1940s as far as I can recall.

A: Okay. With employee relations being good with the management, how do you feel the employees reacted to the union? And the union organizers, were they resistant,

also?

W: No. They were tolerant of what was trying to be done by the union. The big union organizer down in Youngstown at that time turned out to be a Communist.

A: Gus Hall.

W: Yes, Gus Hall. That's the man, Gus Hall. I guess he's still in the Communist Party. He was the last time that I heard.

A: He's still alive, too. He's living in New York.

W: He was one of the big wheels in union organizing. The National Association of Manufacturers and Private Entrepreneurs did not want that. They used the political thing as much as they could.

A: The company, as far as brick manufacturers are concerned especially, had an excellent reputation. What do you feel that was based on?

W: [It was] based upon market acceptability by the big steel plants and every place that they sold the product to. And it was recognized by the Association of Refractory Manufacturers. The steel people had all kinds of testimony, letters, concerning the quality of our product, the brick. You probably have some in your writings here.

A: Yes we do.

W: I think I gave some to you.

A: The primary purposes of these bricks were, of course, to line blast furnaces?

W: Yes, and open hearth furnaces.

A: So, their customers ranged from which companies? Who all were they selling to?

W: Republic Steel, Youngstown Sheet & Tube, Sharon Steel, Carnegie Steel, Bethlehem Steel, all of the big steel plants, the top 500.

A: What was the competition like?

W: The competition was there, but it depended on the locality. That was another element of genius on the part of the owners to place the plant here where it's

proximity to Youngstown Sheet & Tube. . . . You've got the Cleveland area, the Youngstown, Sharon, Pittsburgh area. It was ideally located for that type of thing, where you could ship the finished product right to the market place.

A: It shows a lot of vision. . . .

W: It shows a lot of vision on the entrepreneurs, yes.

A: They knew it was going to grow around here.

W: Other manufacturers would locate their plants near the source of the raw materials, which could be way out in remote places, you know, where raw material exists. Like up in Nelson Ledges or up at Clarion, Pennsylvania, or down south, wherever. But then, you have the additional cost of shipping the product to the market. It's cheaper to ship raw material than it is the finished product.

A: So it is cheaper for them because they were running the ore just over from Pennsylvania?

W: That's right.

A: What are the primary raw materials that were necessary for making bricks?

W: Silica conglomerate was used in making silica bricks, and clay products made the clay brick. There was a mixture of soft clay--that's in a class where it's sort of like plastic clay--plus the hard flint clay, which came from Pennsylvania. There was a mixture, two-thirds to one-third is the figure that I remember. There was two-thirds flint clay and one-third plastic [clay].

A: There were basically two kinds of bricks that were produced--the silica bricks. . . .

W: Silica and clay.

A: Okay. What was the difference between those two kinds?

W: Their ability to withstand temperature in the furnaces. Silica brick could stand a heck of a high temperature but was not as durable as the clay product, so you had to constantly rebuild furnaces. Not constantly, but whenever they would blow out.

A: What do they mean when they say a "blow out"?

W: The heat of the liquid steel in there gets so intense

that the brick can't stand it any longer, and it'll break easier.

A: I see. And the two bricks were used for different types of furnaces?

W: Different applications.

A: Okay, different applications. What other kind of products did they produce at the Fire Brick?

W: They produced these mortar mixes that I told you about. That's silica cement and fire clay, and a ganester.

A: The ganester, could you explain that for me one more time?

W: Yeah. A ganester is a coarse mix of silica conglomerate.

A: I see. We found some indications, as we've been going through the records, that there was some kind of almost cooperation between the different fire brick manufacturers. What can you tell me about that?

W: That's true. Well, there was a price fixing situation on the selling price. If one brick plant was overwhelmed by too many orders or something, it would be shifted to another plant, a competitor. They would put their stamp on it. We had many brick made by our competitors, Harbison Walker General Refractories, North American Refractories. We had about six or seven competitors in this area. If we were overwhelmed here in Niles with tremendous demand where we couldn't meet the shipping date on it, we would out source it to General Refractory, Harbison Walker. That was standard procedure. We would do the same for them.

A: I see. It's almost a cooperation. Everybody was protecting each other.

W: The quality of the brick, there wasn't that much difference between the manufacturers.

A: How much do you think that the Niles Fire Brick had to do with actual innovations in the industry and setting the standard for the quality of the fire bricks?

W: At that time, I think they were well recognized for the quality of their brick. I don't think any of the refractories--at that time they had the assumption that



things were going on forever. But they didn't because basic refractories came in, and that kind of put us out of business. When the B.O.F., basic oxygen furnaces, came in demanding more and more heat resistance, clay brick couldn't stand that. So that's when technology kind of swept the old refractory people off their feet. They had no recourse, except going into basic refractories, which they did. That's one reason that Niles Fire Brick went under, because they did not foresee this change in the demand for the product.

A: They lost the ability to keep up with the technological changes in the steel industry.

W: That's exactly right.

A: They've lost touch, because we've noticed that they were a lot more involved, especially the Thomas family. They themselves were also involved in blast furnaces; they owned several. And they also owned stock in Youngstown Sheet & Tube.

W: That's right.

A: They lost touch with that. You were talking about that.

W: Niles Fire Brick owned stock in Sheet & Tube, stock in Republic Steel, Sharon Steel, even our competitors. We had stock with Harbison Walker. One reason for that--we always got a financial statement because we owned stock, and you could find out what your competitors were doing. So that was kind of an interesting trick. The other fact that we did own stock in Sheet & Tube and Republic, where are they going to buy their brick from? We were a substantial stockholder in the steel plants, and you deal with people who are taking care of you.

A: That's fantastic. It's almost like you get your foot in the door everywhere. Those are very innovative business tactics.

W: Yes.

A: These days, I think maybe, perhaps with the new laws, they might consider some of that unscrupulous, almost. With insider trading and that sort of thing. . . .

W: It comes close to that. I don't think it was considered that back in those days.

A: Not in those days.

W: The guys that own public stock and offer it, anybody can buy it.

A: Right.

W: And of course, Niles Fire Brick is a closed corporation. There's no stock available. It was a closed, family corporation.

A: Did it remain a closed operation?

W: Yes, it did.

A: Because we have found some stock subscriptions, but they are all owned by Thomas', Waddel's, and Clingan's.

W: Yes. [Laughter]

A: So the company never. . . .

W: They never went public, no. After the acquisition by Mexico and Kaiser Refractories, of course, public offers were available there.

A: Why do you think they never went public?

W: Niles Fire Brick?

A: Yeah.

W: Why they never went public? I don't think they needed the money. They did not need financing.

A: They were independent. When you just started in the 1930s, you caught just the tail end of the Depression right before World War II, things were booming for the fire brick.

W: Yes.

A: How long did that continue? How long did the success continue through the war?

W: As far as I can remember, it continued right . . . of course, the war put a tremendous demand on fire brick. Without fire brick, you can't make steel. You have to have this ability to contain the heat. It contained-- see, I got out of this. When was it? The late 1940s. I think things were kind of slow when I came back to the Fire Brick after serving in World War II. It probably continued till, I'd say, 1944 or 1945, somewhere in that neighborhood.

A: Things began to slow down afterward? Is that when the technological changes started to take place?

W: When was World War II over? 1945? The demands in war conditions are lessened, and therefore, steel prices are lessened, and fire brick prices are lessened. I think it was just an economic slowdown on the part of the entire country at that time.

A: Post-war recession.

W: Post-war recession, right.

A: The company was bought out by Mexico Refractories when?

W: The date has slipped [my mind].

A: I'm trying to think of it, too.

W: Somewhere around 1952 or 1953.

A: So it was in the early 50s, we'll say.

W: There was a strange thing that happened. The plant was actually bought by J.B. Arthur. Instantaneously, it was sold to Mexico Refractories. There was a tax advantage involved in it. So J.B. Arthur--I know him--he was the head of the Mexico Refractories Company. So he bought it. The same day, it was sold to the Mexico Refractory Company.

A: It's almost like he had taken a company and just turned it into something that he could write off. His interest wasn't as great, in other words.

W: Well, he was ready to retire at that time. He was using his personality and his knowledge of the brick business to do that.

A: He was at Mexico Refractories?

W: He was president of Mexico Refractories.

A: Were they in the same business as the Fire Brick?

W: Yes, except they were located in Mexico, Missouri. Once again, there was a case of locating the plant near the source of raw material. They had great distances to ship their finished products, you know, into St. Louis.

A: That was the Arthur mine?

- W: Yes, the J.B. Arthur mine.
- A: As far as the raw materials are concerned, I'd like to get back to that a little bit. What were the primary sources--which were the different mines that the Fire Brick [Company]. . . ?
- W: Niles Fire Brick owned--we had Nelson Ledges, which is a product of the ice age up there. They had these silica conglomerate mines up there. It was an open pit mining operation, whereas the clay mines that we owned over in Lucinda, Pennsylvania--Brookfield, and over in that area--they were deep mined. You had to go way underneath the ground to get these clays. The bed of the clay, you get down in the mine, it would be maybe as wide as this room here. It would be [full of] hard clay. There was dynamite blasting it out, getting it out to the surface. I think the soft clay was always on top of the hard clay. It's the sedimentary pressure over thousands and thousands of years, you know. Hard clay, they mined or drilled out, whatever.
- A: What makes good clay for fire brick?
- W: What makes good clay? Nature does that.
- A: As far as it goes, I guess I'm trying to say. . . .
- W: It's decayed fossils of plants, animals and everything else over thousands and thousands of years.
- A: What I'm trying to say is, what makes it good clay for firebrick, low quality or high grade?
- W: Absence of iron. If iron is in there and supplied to the furnace, the iron burns out immediately, and the brick disintegrates. So the absence of iron ore is one thing. The purity--we were always checking with the Batell Institute and Mellon Institute (Carnegie Mellon) for the perocity of the material. The clay content and the parametric--they had a pyrometer in there, which showed the slumping temperatures of the various clays. For instance, if it slumped at 1,500 degrees, it was no good, because furnaces operate around 2,000 degrees. So we had this pyrometer test made by these laboratories, and they would send back reports telling us what the temperature rank would be on this product.
- A: I see. They had the raw materials themselves shipped right to Niles?
- W: Yes.

A: Once they got the raw materials here--can you give me an idea how they went from raw materials to the finished product?

W: Yeah. The product was loaded at the Niles plant, and went into operations. The first phase was a grinding process. This was a huge operation. They had what they called muller wheels that stood as tall as you. They were heavy things [that went] around and around. Underneath, they had screens underneath there. This would continue to grind and continue to grind. After it was separated to the right size, it would go down into another operation, then up into other operations. The primary grinding took place, and the secondary grinding took place. They had a whole flock of grinding apparatus over there.

Then it came down to the presses. The grinding to the pressing operation. They had these huge presses over there. They exerted a tremendous amount of pressure on this product. It had to form a brick. And they were taken from the presses to the drying operation. They used the excess heat from the kilns over there for the drying operation. They were put into a drying area there for so many hours. Then they were taken out, put into kilns for setting operation. It was then that they were turned into brick because they were fired at 2,000 degrees higher. They had people watching the kilns. You could look through with a pyrometric instrument and tell what the heat was in there. It took about almost a week to fire up a beehive kiln over here and get it to the right temperature. Then the heat was turned off and they just sat there for maybe another week. It was almost a month cycle--a week firing, a week or two cooling, and the third week was unloading, where you get men in there to stack them in piles and get them out.

A: Which part of the operation employed the most people? Just give me a rough idea. Which was probably. . . ? I would think it would be unloading, wouldn't it?

W: Let me think here for a while. The pressing operation, they had eight presses over there. That wouldn't account for too many men. They had about 24 people there. I would think the--I don't know. It's pretty evenly divided, I think. The pressing and grinding operation, and setting were about evenly divided.

A: I see. Because it's almost a two-step operation.

W: That's right.

A: They did the grinding and pressing, and then the setting and the firing.

W: Yeah.

A: I see. That answers a lot of questions that we've been having about that. We've been finding that the work crews were divided. We've got crew A and crew B. We haven't been able to figure out for the life of us why there are these two different crews, especially, we find Mr. Sheehan. . . .

W: Pat Sheehan.

A: He was in charge of one of the crews. Do you know Mr. Sheehan?

W: Yes I did.

A: Is there anything that you recall about him?

W: Well, he was an Irishman. He treated me very fine. He was a big guy, about six feet, four inches. He was superintendent of the plant when he was very young. Everybody respected him because he had experience and knowledge. He was very knowledgeable about the product and what we were trying to do. He lived over on Vienna Avenue at that time, as I recall. I used to go with him on trips over to the mines of Pennsylvania and so forth. I had a lot of respect for him because of his physique for one thing. He was a big fellow. I also had a lot of respect because of his nationality. I was in the office once over there when we had a slow period. [It was an] economic down there. I forget what period of time it was. He would go to the phone and call up somebody at the Sheet & Tube, another Irishman down there. [He called] the head of the masonry department. He said, "Hey Mr.," whatever his name was, "I've got some beautiful brick coming out of the kiln." (The steel masonry superintendents at that time had the responsibility of ordering the needed brick for rebuilding furnaces and repairs.) [So he said,] "I'm willing to send you a car load without even a purchase order. I'm going to send you some of these bricks, okay?" "No problem," [the man would say].

A: I've found some interesting letters from the masonry department at Youngstown Sheet & Tube, and I believe, now that you say that, I can see Mr. Sheehan [do that]. One

of the letters I found was very apologetic: "I'm sorry that your superintendent is upset with me right now."

You say Sheehan's nationality had to do with his being respected. The one thing we've found that's interesting about the Niles Fire Brick is their willingness to--especially around the turn of the century--to hire ethnic Americans and new immigrants, the Central and Southern Europeans. You don't find that in a lot of other industries, or if you do find it, you find a lot of abuses.

W: This was always on the basis of a recommendation of somebody that worked at the plant here. If somebody had the name of Cicerello--whatever his name, it would be an Italian, prominent name.

A: Or Joe Pallante.

W: Joe Pallante, right. We had Italians there. We had Welsh. The management, they were kind of tolerant toward the Welsh, because they were Welsh themselves. We had a few Hungarians that were there. There were very few blacks.

A: That probably had more to do with population.

W: Yeah, I think it did.

A: In this area, there really weren't that many. Most blacks that migrated North settled in Youngstown closer to the mills, than actually came to Niles.

As far as the fraternal organizations are concerned, the Italian community--which in Niles, because of the Fire Brick, you've got the Italians coming to the plants, the Cicero's and so on. They were able to establish a community in Niles. It's in a lot of ways different. They had the Bagnoli Club.

W: I've been there.

A: What can you tell me about the Bagnoli Club?

W: I just visited it once when I was over there. I knew that it was there. I never bothered to go up there, but there's a town back in Italy where all these people congregated together. They were all good, hard workers. They had some experience in brick plants, I suppose, back in Italy.

A: So they were almost the perfect employees to have. As far as it goes, you were talking about the economic

downturn and that the plant wasn't able to keep up with the changes in the steel industry. . . .

W: It was not able to keep up with the technology.

A: How did production decline? When you were running at your peak--say, during the late 1930s and in through the 1940s--what kind of production could the plant put out?

W: It was geared toward the demand of the product.

A: So you could get. . . . Let's say you were on your maximum capacity; you were putting out as many bricks and running as many shifts as you can. How many of them [would be running]?

W: As I recall, the production figures . . . about a half of a million and its equivalent clay brick to a million silicone brick. It was about a one-third, two-third ratio there.

A: What kind of different bricks are there, while we are on the subject?

W: In the refractory business?

A: Not so much as just the refractory business, but just what you produced here at the Niles plant.

W: The refractories, they didn't produce any building brick or anything like that. The bricks they are using at the present day are basic oxygen, B.O.F. brick, they call them. They're made out of chromic acid and other materials. We made these down in our plant in Columbiana. After Mexico took over, most of the production was shifted down to where they don't produce any clay brick or any silicone brick down there. It's all basic brick and its exotic materials, minerals that went into it. It's most difficult to handle, too. It's highly explosive and so forth.

A: So it's a dangerous operation.

W: Yes, it's a dangerous operation.

A: It's certainly not an operation that you're just going to have in the middle of Niles.

W: That's right.

A: I see. So that's part of the reason they moved to Columbiana.



W: Well, the plant was already established in Columbiana. There was an \$18.5 million plant down there. That's why I ended up down there as purchasing manager.

A: Did a lot of other employees go down there?

W: Some did. They took some people down there.

A: Is that still in operation?

W: Yes.

A: What's the name of that company down there? I think I'm going to go down there one day and talk to them.

W: It's no longer the Kaiser Refractories. It's called National Refractories now.

A: Okay. I think my dad went down there and put in an application after United [Steel] laid him off. Okay, that's just for my own reference.

W: National Refractories--they're still in operation down there--but, I think they're probably having some problems, too.

A: As far as it goes, when Mexico took over and then the Niles Fire Brick shifted over to Kaiser Refractories--before they moved operations--was there a big difference between what you would call the earlier days when the Thomas' ran it and then when Kaiser got their hands on it? Was there a lot of change?

W: Yes.

A: How so?

W: Well, in working for the closed corporation over there at Niles Fire Brick, you wore many hats. I was in finance most of the time, but it was not unusual for me to have John Clingan say, "Why don't you run over and check on the lumber operation. I want you to do this and I want you to do some exploration for clays down in Kentucky." I was given many diverse jobs to do. Now in the big corporation of Kaiser, you don't do that. It's confined to the various departments.

A: I see. That kind of takes something out of the work.

W: It does. That's the reason I enjoyed working for the Niles Fire Brick. You did a lot of things. You did legal checking, legal research in their own properties

and taxes. You had to wear a lot of different hats. I was still getting calls from Kaiser long after I retired. They wanted me to do some tax search for them up at the Trumbull County Court House. They didn't even know that we owned property. They brought it out to me, and I said, "Hey, somebody sent a letter and they want us to buy 400 or 500 acres of property down in Kentucky." He said, "Do we own that?" I said, "Sure you do." [Laughter] I had the bill of sale that the legal department sent, and I said, "Sure you own that property." That's one thing about corporations, I guess. They don't always know what they're doing in some things.

A: They lack that personal touch.

W: Yeah, they lack the personal. . . .

A: Everybody at the Fire Brick was almost like a family. That's great. Well, is there anything else that you'd like to talk about, about the Fire Brick today?

W: Kaiser Refractories in more recent times employed many Youngstown State University graduates in engineering and quality control, safety, accounting, and production control.

A: Is there anything else you'd like to talk about?

W: Oh, I can't think of anything.

A: Okay.

W: I don't know whether I've helped you.

A: You have helped tremendously, Mr. Wright, and I want to thank you personally for coming out and talking to me today, because you have given us a lot of information. You've filled in a lot of holes for us, so thank you very much.

W: I want to wish you luck on your project.

A: Thank you.

W: You're welcome.

END OF INTERVIEW