YOUNGSTOWN STATE UNIVERSITY

ORAL HISTORY PROGRAM

Brick Industry

History of Crescent Brick Company

O. H. 392

JOSEPH YORKO

Interviewed

by

Thomas Hess

on

November 26, 1976

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INTERVIEWEE: JOSEPH YORKO

INTERVIEWER: Thomas Hess

SUBJECT: Production Changes, Wages and Benefits, Different Types of Workers, Brick Industry since 1929

DATE: November 26, 1976

H: This is an interview with Mr. Joseph Yorko taken at Crescent Brick Company office on November 26, 1976.

Y: I started April 29, 1929. I started that day in the brick plant. My first job was scratching screens. That's for the clay to go down through and make the brick out of. You had to make sure the screens were open so the fine clay would go down through them. The course clay would go back down in the grinders. The young men at that time went to hacking, taking brick off of the belt and placing them on cars. One plant would be down and the boss would automatically take you to another plant, like Rockyside. We had four plants at that time. I was hardly ever without work. One plant ran out of kiln room and ran out of place to put brick; they automatically took you to another plant. This was the only ladle brick plant we had. They faded out and this is the only plant left now. I've been around these brickyards forty-eight years.

H: One of the things that I would like to find out from you . . . I asked a man in management and he said I should ask someone like you that was in production. I would like for you to go in a mine someplace and take some clay out of it and bring it down and just sort of step by step go with that clay right through the whole process and put it on a truck and head it for Wheeling as a brick. How do you do that today? Then we'll back up and you can say how you did it when you started working in 1929.

We can see then the difference. You've got a clay mine out in Nardins, don't you?

Y: Right.

H: Let's go out there and get a load of clay and bring it in.

Y: It's all done automatically now. You have a drill machine to drill your holes. You shoot the clay down and then you have a loading machine. You load it in the shallow car and the shallow car takes it over and puts in on the belt line clear back in the mine. The belt takes it all of the way out to the clay bin outside. Fussey has a job, contract, to haul. He hauls it up here and dumps it in the bin. We have conveyer belts take it over to the shop into another bin. Then we have automatic feeders that feed the clay into the grinder. At the same time you have a certain amount of water put in. It's ground up, coursed up, returns back, goes up to the screens, and the screen makes it fine. They are electrically heated and you don't have to scratch those screens like I did. The course stuff rolls over top and goes back to the grinder. The fine stuff goes to the conveyer belts. It's divided up into mixtures then. The mixer keeps stirring it and it drops down into the press, the charger box. The charger fills your mold boxes up and goes back. At the same time the charger goes up and kicks the brick out while it fills the mold box up with more clay. The hackers take it off and place it on cars and they come out; the transferman takes it. This motorized machine takes them down to the kiln placers. The kiln placers set them and place them in the kilns. To finish the kiln takes sometimes a day and a half, sometimes two days. You get about 70,000 or 75,000 in a kiln. Then you go ahead and burn them, dry them in the kilns. We don't have dryers; we have to dry them in the kilns. It takes eighty full hours to dry them, and then you go on up to carbon stage. You have forty hours of carbon stage and then you go ahead from 15 degrees or 20 degrees up to 1960 degrees or 1970 degrees. You hold them there for about five days. When your kiln is done it takes about four or five days to cool. Then the drawers take the brick out and place them on skids and you're ready for shipment.

H: When these are put in the kilns is there a certain way they have to be stacked for the heat to get up through them?

Y: Yes, you finger space them. They make heads out of them, a three-brick head clear across the kiln. They keep placing them up and when they get up too high to reach anymore they start another head. Then they stand on this head and start placing this head up. It's a ladle brick, dry press that's pressed real hard. That's where you swab different than a mud brick.

H: This is all dry press?

Y: Yes. There is very little moisture. Then you have to have some moisture; you can't make them too dry or too wet. Too wet is just the same as too dry.

H: When that clay comes out of the mine up there does it have to . . .

Y: It's lump. It's going to a crusher. The belt line comes into the crusher and then another belt takes it to the bin.

H: Does it have to season at all? I was talking to one of the men and they said they used to mine it and leave it lay; they called it mellow.

Y: That was for paving brick. This, the fresher you can get it the better off you are. This other clay, if you let it air out for about a week your brick will crack. We found that out many times. We had a stock of clay laying over and maybe we were down for a week. We would start making brick again and it was very hard. As soon as fresh clay started coming we worked just like night and day. I used to oil in there and I had to be the guy to make the brick, make sure the presses were making good bricks. You would do everything in the world with those presses and you couldn't help it. When that fresh clay started coming, that was it.

H: With that experience it almost payed to just have fresh clay coming in all of the time.

Y: Right. That's what we tried to have.

H: You say that this clay is mined pretty far back in the mine now.

Y: It should be almost three-quarters of a mile out.

H: How long have they been mining there?

Y: I think since about 1947 they started that mine. We had a bottom vein of clay. There are three veins of clay: bottom, middle, and then your top strip. You can strip that clay. Your center vein is your best vein.

H: Is that the real thick vein?

Y: Yes. This middle vein here runs about eighteen or twenty feet of clay. You have to use so much shale in your clay, so we had to dig for shale to get a certain amount of it in. When you make a brick and have too much clay it wants to shrink. Then there is no bloat to them. Your slate makes your brick bloat in there whereas if you have too much clay, you don't get that effect. You have to have so much shale then.

H: These ladle brick, are they different from the furnace brick?

Y: It would be the same thing. I think we're up to at least forty different types. Each company has a different kind of a ladle. We make the semi-universal in the five inch, six inch, seven inch, and nine inch. You have starters for those. Of course, they make the starters at the other plant, where you start them out in the ladle. Then you have about five different arch brick. You stand them up on the end and they just go around in a circle. These universals and semi-universals took the place of circle brick; we used to make circle brick. It took so many of them to make a circle.

Homestead, they use the number one split, the number two split. They are one and a quarter inches. They claim they save room in the ladles.

At Midland they take a 4 X 3 arch. A lot of places take a six inch arch. You have five different arch brick that you make. Most of the companies buy their ladle, their mine, their idea on saving or liner ladles; they're different. Weirton takes an awful lot of universal brick.

H: A lot of your brick go to Weirton Steel?

Y: Yes.

H: A real close neighbor makes for less transportation.

Y: That's right.

H: How many men does it take up there in the mine to run it?

Y: There are only about six in there. They have a drilling machine; they set it out and drill their holes. They have their loading machine to shove a car. Like I say, there is a conveyer from the inside way out to the crusher.

H: No more mules and little carts?

Y: No. At that time each man had to load about twelve or fourteen cars. You get two and a half or three tons on a car. Those days are gone now. You had about fifteen guys loading in there. Then you had a couple of guys on track setting tracks in all of the time.

H: Just adding track? Because you went back in the mine.

Y: Yes, repairing. Then you had a guy outside building cars and repairing cars. It took a lot of men to make a brick at that time.

H: Thinking about today again,, about the only manual labor then that you have are the hackers that handle those bricks and load them on the carts and put them into the kiln.

Y: Then you have a six man crew in the kiln that takes them off of the cars and puts them in. Then we have six men that take them and unload skids after they are burned. They get them ready for shipment.

You used to wheel brick with a wheel bar. Before it was three brick you would haul eight, but the regular ladle brick, two and a half inch ladle brick you would wheel a hundred. You placed them in a car and loaded them. Now you put them on a skid and that's it. They take them down to the shed and put the wrappers on them and they're ready for shipment.

H: This is called a beehive kiln out here?

Y: Right.

H: You fire those all with natural gas?

Y: Yes.

H: What do you do when the gas company curtails your amount of gas?

Y: As Mr. Winslow says, "What are we going to do, slow her down? Run her and then shut her down." This is really going to hurt a lot of people.

H: What happens to brick that might be in the middle of the fire? You said it took so many hours to dry and then you took so long to raise the temperature to 1900 degrees.

Y: It takes about fifteen days to be in the kiln, sometimes sixteen days. It all depends on what material you have. We ran good clay about two years ago and we saved time on drying, on carbon stage, and on burning the whole thing. It was beautiful brick.

H: Is this clay coming out of the same vein and it varies?

Y: Yes.

H: You might go through a little stretch where it is different then than the other?

Y: Yes. There's not enough clay and more stone. It's a little bit hard to make brick out of. These top veins run out of property so they hog all they can out of the sides, ribs. Then your bottom comes up. A lot of places cave in and they let it go.

H: Does shale come out of the same mine?

Y: Yes.

H: The shale is underneath?

Y: Yes. Each plant had a mine and you have a main entry and then branch off.

H: Make rooms like?

Y: Yes. You go off one way and then maybe branch off a little bit. The state has so much for you to hold in there.

H: In talking to one of the fellows, they said that they used to ship a lot of clay along with the brick to the steel mills, but this fellow didn't know what they did with that clay at the mills. Do you know what they . . .

Y: I don't know whether they mixed something else with the clay, but they shot it in, over the walls, sprayed it in.

H: Would they lay the brick up first?

Y: Yes.

H: Sort of put a plaster coat on or something like that?

Y: Yes.

H: You used a term that not everybody would understand. You said that the brick has to bloat. Can you explain what bloating is?

Y: They swell a little bit. They expand and tighten up in the ladles.

H: Are these put in a ladle with a mortar or are they just stacked in?

Y: I think they're dipped.

H: When they bloat that would make sort of a solid wall.

Y: Right. You wouldn't get any leaks in there. When that starts penetrating in that steel, that's going to dig right through, so you don't allow that.

H: What temperature did you say you have to hold these bricks at?

Y: Between 1960 degrees and 1970 degrees.

H: That's real critical, that temperature?

Y: That's right.

H: What happened if you shot up to 2000 or 2100 degrees?

Y: They start bloating and cracking. They're too big then. They swell right up.

H: What kind of temperature do they have to stand when they go in the ladles?

Y: I don't know.

H: I've heard something about continuous kilns as opposed to the beehive kiln.

Y: You get away with your setters. Up there they have automatic hackers too. They have a press tender and that's about all. They load their cars and they automatically go into continuous kiln. You're saving seven men. That's a big savings and no damage. The more you handle the brick everybody is going to get their share of damage of it.

H: How many bricks does a fellow handle a day, one of your good hackers down here?

Y: We expect everybody to handle 5,000 or more. That's considered a day.

H: Can we back up then to yesteryear when you first started working here? When you started what would have been different? You told about the mine being different and how many different men there would have been up in the mine. Once they got that clay out of the mine what did they have to do different? You had to scratch screen for one thing.

Y: Yes, scratch screens. A big improvement was the de-airing. As the press is ready to get the final squeeze on the brick the airing machine pulls all of the air out. In a mold box the air is trapped in there and you couldn't make the brick as hard. They put in a big de-airing machine up there and fixed it. You have to have special dyes. As the press is pressing the brick you're pulling the air out of the mold box. That way you get more clay in and you get a heavier brick. That was the biggest improvement they made. It is a better lasting brick now.

As far as the changes here, we have the bigger presses in for bigger bricks. At that time 4 X 3 arch was the biggest brick that you could make. Now they put in the big presses and we made a nine and ten inch brick, big slabs.

We made progress on the drying and burning. It's not taking as long now as it used to to dry them. I don't know why it took them as long.

H: When they made all of the paving bricks were these made pretty much the same as the ladle bricks are made today?

Y: No. You had a pug mill and you tempered your clay in there. You had a pugger that stood over and watched that clay. The tempered clay was pushed through a dye. It

would come on a small belt and through a cutter. As that went through the cutting machine it would flop. You had five or six hackers in there placing them on cars. Then you had to put them through dryers.

H: That was a separate stage, drying?

Y: Yes.

H: 1929 was just the beginning of the Depression. Did you work pretty well during the Depression?

Y: The first year we worked really good. They gave us a little bit of work. We got an order in and the boss told us that if we wanted that order and would work for 25 cents an hour to go ahead and take it. We all agreed to work for that so we went to work. That order must have lasted two months or something like that.

Then they gave us a little bit of work repairing the kiln bottoms. That was about it; the whole Depression was over.

H: You just worked a little bit and then were off?

Y: That was it then. We managed to fill that one order.

In 1932 we started back up again. In 1937 I finished up paving brick. The 1936 flood didn't help any either. It did a lot of damage. We lost seven kiln crowns down there, that's the top. They all fell in.

H: The water must have gotten pretty high then?

Y: It just about covered the whole crown.

H: That would have to be about fifteen feet of water out there then?

Y: Yes.

H: You told me a little while ago that your father worked in the mines and in the brickyard. Do you remember any of the stories that he would tell about how things were different?

Y: No. I was eleven years old when he got killed in the mine.

H: Was there any kind of insurance or workman's compensation?

Y: Just a very little bit.

Now you have inspectors in the mine trying to make it safe. At that time it didn't make any difference. If you got killed they just replaced you with another man.

H: How old are you now?

Y: Sixty-three.

H: They just didn't have too much in the way of mine safety or workman's compensation or anything like that?

Y: Nothing.

H: You act like there were a lot of different mines along the hillside?

Y: Yes. Globe Pipe Shop and Rockyside Brick Plant were right above the dam.

H: They would each have their own mine?

Y: Yes. There was the Eagle Pipe Shop, then the Aetna Brickyard.

H: The pipe shop, you're talking about clay sewer pipe?

Y: Yes. Then you had the Crescent Brick Plant and the Clifton Pipe Shop. Below town there was a Black Horse Brickyard and Zalia Pipe Shop. There was also Valentine's Grinding Plant. Everybody had their own mine.

H: Were they mostly all working the same vein?

Y: Yes. It seemed like it ran downhill.

H: As you went south it got deeper?

Y: Yes, deeper and a little more stone. Friedman's Brickyard was there too, below town.

H: That's where Manford's Garage is now?

Y: Yes. I can't think of the fellow that bought that out, but he started making some building brick there for a little while. He didn't make out though; they shut her down.

H: We're interested where people came from. We know that

unless you're an Indian your folks came from someplace other than around here. Where did the Yorko's come from?

Y: Czechoslovakia.

H: Do you know about when your folks came over or your grandparents?

Y: I did, but I forget now.

This whole hill was nothing but houses. We had a barracks up here that housed over a hundred men that worked at these brick plants.

H: What year are you talking about now?

Y: That would be in the 1900's, maybe a litttle bit before. They would haul their supplies up and they had their cooks there. It was like an army camp. You had your bunks and they had cleaning ladies there and cooks and a supply sergeant. There were around 450 men that worked at the brickyards at one time. There was a railroad that came up through, but no road. Some of the men came by horse and buggy; some just rode horses. I remember when I first started I walked. There were maybe three or four cars up here at that time.

H: Do you remember when any Negro folks came up here to work?

Y: I don't remember when, but we had colored people working here a lot of years. There weren't too many though. It was pretty hard work and you had to be starving to go out the door.

H: You said you worked for a quarter an hour during the Depression. Wages have changed a lot. Besides wages, how about other . . .

Y: You didn't have any benefits.

H: No benefits at all?

Y: None.

H: No vacation, insurance?

Y: Nothing. You had state compensation; that was about all. Of course, I think that was a must. There is a lot of difference; you can see it. The changes are so small and so slow coming that a person doesn't even realize

until you stop and think. There is a big difference, but it was slow getting around.

H: Does most of your stuff go out on trucks, or does most of it go out on the river?

Y: Trucks and rail.

H: Is there anything else that you can think of? All of these company homes are gone, the barracks?

Y: Right. Little by little people started disappearing.

H: This is a thing that I haven't been able to find an answer to. What happened that made these different places all disappear? You named right down the river. All I find now is Crescent Brick Company.

Y: Sulphite went out on account of concrete and plastic pipe. That's fading out more and more. Your paving brick, there are no more paved roads, brick made. They phased out. The only thing you have now is ladle brick.

H: That goes along with the steel mills?

Y: Right.

H: Let's hope we don't get rid of the steel mills.

Y: (Laughter)

H: The same clays and everything were used for these other products?

Y: Right.

H: It's just that the product itself has been replaced with plastic or concrete, blacktop, whatever it was.

Y: Concrete and blacktop took over the roads.

H: When did the paving brick start to fade?

Y: I don't know when it started happening, but it started happening before 1937. We phased out the Aetna Brickyard in 1937; that was the end of it.

H: If there had been business they would have built those kilns back up that went down.

Y: We already built them back up.

H: You built them back up?

Y: Yes. We kept on going but there wasn't the business.

H: Somebody has told me about a Chelsea China. It says that that was the only china plant here.

Y: There is still a Chelsea Road down there. Now there is Crown China instead. I think they hired about 450 at Chelsea.

H: There are some ladies in town, particularly in my congregation, that worked there. They seem to use a lot of lady help. Was that company connected with the company in Toronto? One of the ladies that I'm thinking about, when this shop closed she went right over to Toronto and worked in a shop over there.

Y: You're thinking about the Stanton plant now. I don't think they have a pottery in Scio.

H: Well, I've kept you from your work long enough.

END OF INTERVIEW