

INTERVIEW WITH

MILLIS PARSHALL

TOPIC: PARSHALLBURG MILL

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Nancy Krause

Parshall Interview

- Q. We were talking about the way that the dam was made.
- A. (Refers to photo of children with wheelbarrows down in river.) But you can see right here that there are logs there. And you see the rocks? And on top of that is concrete which was put in in later years. And then there are logs in here going this way.
- Q. Now, how did they hold back the water--it doesn't seem to be going over very fast.
- A. Well, the water is probably pretty low there. That picture was taken in the middle of summer when the water was low. And in fact, in the summer when the water got really low enough we couldn't use the mill! And when the water was high in the winter time--if the water backed up until there was no drop, you couldn't run the mill.
- Q. What do you mean it backed up until there was no drop?
- A. Well, downstream, for instance, in the winter time if you got a bunch of slush ice--uh, the river froze solid down below the bridge--and the water backed up so that there was no drop over the dam, then you didn't have any water power! And then in the summer if there wasn't enough water to have a drop through the turbine, then you didn't have any water power either.
- Q. Well, what did they do then?
- A. You didn't do anything!! But in later years my dad bought an old tractor and put in a tractor engine in the basement of the mill to run the mill when water conditions weren't correct.
- Q. Looks like you kids are working pretty hard there! (Looking at photo of Mr. Parshall and his brothers and sisters repairing the dam during low water in summer. They are actually in the river just below the dam gathering the scattered stones to rebuild the apron.)
- A. I remember that. We put planks (on the river bottom) and run the wheel barrow on the planks to get the stones--see there's the stones out of the dam down here and we run them back up in there again.
- Q. I can see the logs.
- A. Yes, there's the logs.
- Q. O.K. Now what about this. You have drawn a picture here.
- A. This is a rough sketch of what Havana used to look like before

my time. This is the mill here, and that's that store building right across the yard. And the barn across the road. And up here there was a bunch of little houses; I don't remember how many. As I remember it, they had it platted out into blocks, like a town, but what I remember is that they took two of these houses right here and put them together and made this house where we used to live; they put it together in the middle. That's where we used to live; two of these little houses put together!

And then over here my brother was born in a little house on the top of the hill. This is where I was born. There was a little house here and the river came right around like that, and this house was right on the river bank. We used to go to school right here; there's where the school was, a little country school. Kettler's is up here. Now this used to be a Parshall farm; my dad used to live there. Where Kettler's live now. And this farm up here--it belongs to Carlton's--that used to be the Mill House. That used to be a Parshall farm. The first house--big, old white house. Used to be a beautiful looking place. We used to have pictures of that that looked like a mansion, you know, pillared--but that was the Mill House at one time. In fact, I've seen pictures of it; it looked like a picture! All painted up and a beautiful looking place.

And then the family owned land all up along the river here, I don't know how far. But we used to have deeds--or old papers, that showed that the family owned land clear up around here. Besides this farm and this farm here. But I don't know how far up. But they used to tell about big walnut trees up there that they cut for lumber and stove wood and what not.

- Q. What about that bridge? Was there a different bridge? Is that an old bridge?
- A. That's the same bridge that's been there as long as I can remember. What the original one looked like, I don't know; that's not the original bridge. I suppose the original one was wood.
- Q. Let me take a look at this photo. Oh, it looks so nice there! (Photo showing mill with truck loading at the storage bin end.)
- A. You see that's when I was a kid, well, I was probably in high school when that picture was taken; you can tell by the age of that truck. Well, that truck is about a 36 or 38. Well, about a 36.
- Q. Now the truck is backed up to the . . .
- A. To the store building where they were loading flour. You see, when my dad bought that place they started delivering flour around to stores around the state. They went up maybe as far as Bay City and all around within 50 or 25 miles delivering flour. But before that they depended upon the farmers to come in to trade wheat for flour, mostly local trade. But in later years

they delivered flour around and they had quite a business selling pancake flour.

Q. Is that a pump? (Referring to photo of Mill again.)

A. That's a dug well, there, with a hand pump on it. And in fact my dad got my brother to go down in there and clean it out one time. People would come in there on week-ends, swimming and messing around and they would throw all kinds of junk down that well.

Q. You had trouble even then!

A. Oh, yeh!

Q. Now, you mentioned swimming. Would that be the Mill Pond?

A. Well, they swam up above and below both. And there was always fishermen there. You just couldn't keep people out.

Q. Now there, there is quite an apron on that. (Refers to photo of dam)

A. Yes, that is after it has been finished. It's probably the same year after it's been rebuilt.

Q. Boy, that was a lot of work, wasn't it?

A. You bet. That looks to me like fresh concrete. These stones are all picked up, or most of them, and put back in there. And it's concreted. That's probably the same summer.

Q. And then this is the area where the ice--

A. Yes, the ice comes over--you see that's the top of the dam. The ice in the spring comes over there and slams down on top of this thing as well as undermining it and takes a hunk out of there. Right now I think there's a big hole in the dam on this end.

Q. Was there a way to regulate the way the water came over?

A. No. Well, we used to in the summer time, we had holes drilled in the concrete across the top and we put boards up there to try to keep the water level higher. And dad was always after us to go out there and plug the leaks. The thing really wasn't very water right and we were always out there putting sand and gravel in the holes--or cat tails or anything else we could get in to plug up the leaks!

Q. So then was most of the water channeled through the flume?

A. Well, yes. The water went through, around on the other side here; the water went through the slume and dropped down through

the water wheel and came out right down through here. (Points on photo to tail race on mill building.)

- Q. There was an actual pipe that led to the turbine then?
- A. Well, the flume just went in under the mill and it had a rack to take the leaves and junk out of the water, but actually the flume just extended under the mill. And was made out of wood. And then the turbine was just a hole in the bottom of that flume. So the water was like, six or eight feet of water under the mill in this flume and then when you opened the gates on the water wheel it just dropped right through the water wheel.
- Q. How did they start the turbine?
- A. We had a wheel upstairs with a long shaft down under the water. You just turned this wheel and it opened the porch along the side of the turbine. This water wheel was a big cast iron thing four or five feet in diameter (I don't know how big around--this was thirty years ago!!)--at least five feet in diameter and it had little gates around the side and you opened these gates and let the water in. And when the water dropped down through the wheel, it caused it to turn.
- Q. Was this at the top of it or at the bottom?
- A. The gates were on the side of the thing. But the whole thing was made out of cast iron and bolted together.
- Q. Now was it totally immersed in water.
- A. Yes. It was under several feet of water.
- Q. How did you regulate the speed? Is that how you regulated the speed of the machinery?
- A. Well, it depended on how far you had the gates open to let the water in. And also the head of water. In the summer time you only had three feet of water and you didn't get near as much power as you would in the spring when you had eight feet of water.
- Q. Now here it is in winter. (Referring to photo of mill in winter surrounded by ice. Ice is level with dam.)
- A. Yes, and it shows the river backed up. That's why that picture was taken. The river is frozen down stream and it's backed up and there is no water power there. You see, the water below the dam is about the same height as the water above the dam. There is no drop through the turbine and you just couldn't run the thing.
- Q. Now there's the old building--
- A. That's the old office building right there. I remember that

office building had a hole about that big around right through the ceiling where somebody'd shot up through there with a shot gun!! They used to tell about it! It was before my time! Somebody came in there with a shotgun and was messing around and shot right up through the ceiling!

Q. Now let's see. Were there grind-stones? Or what did they do?

A. They used rolls. In the front year of the house where we lived up above there was an old grind-stone. The old original. And it was at least five feet across. And it was made out of key-stone shaped stones with an iron band around the outside and in the center was a square metal hole to drive (it) and the thing was made in France. And it was the old original, a hundred years old or better. You know, when they took them out, they put one in front of Carlton's house and one in front of the house where we lived. The one in front of Carlton's, they just tore it apart and the stones were all over the place. But the one in front of our house we set in cement. You know, the iron band around the outside rusted out and one Sunday afternoon we got dad and the kids together and we set those stones in cement to preserve it--but it's gone, I don't know what happened to it. Whoever took over didn't know what it was and probably threw it out. I've been by there several times and I can't see it.

Q. Now where was the Carlton house where the other stone was?

A. Well, it used to be the Parshall house (Mill House) but the stone was sitting right there under a tree; there used to be a tree about here and it just, you know, the kids threw it around. And the one over here was sitting right there (see diagram Mr. Parshall drew as he talked). It used to be two trees here, big Maple trees and that thing was sitting right there and we made a special effort to preserve it, but it's gone as far as I can see.

Q. Now I understand that it took two stones to make a mill--

A. Right. You got two halves there, see.

Q. That was the top and the bottom?

A. Right.

Q. O.K. And then it was changed to rollers?

A. Yes. There was, I think, four stages of rolls. You want a description of how they worked?

Q. Sure, and like what floor would they have been on? How did that work?

A. (Refers to drawing number two) Well, right here there's hoppers, right in the front of this building and the farmers would come and--this thing was built up mostly for custom work for farmers, locally. And I think they would bring their wheat in and trade it for flour. And I think they got a third of the weight back in flour or something like that. There was a formula they went by. And right in here on this dock there were hoppers and the wheat came in in bags and you just dumped the bags down that hopper. And then an elevator took it up and up in here (He points to second floor, front on diagram) there was a machine to clean the sticks and stones and stuff, leaves and what not out of the wheat and blow the husks out and the straw. And it came down into a scales right on the inside of the wall right--the main door was right here (He points to spot next to main door on inside) and just on the inside of the wall right here there was a scales which was suspended--it was a big wooden box with a sloped bottom and it was suspended on a beam--a beam type scales. And so the wheat came down after it was cleaned into this box which was just hanging in the floor, in a hole in the floor. And then they weighed their wheat. And dumped it and from there it went down and was transferred by another elevator into a storage bin--well there were storage bins here and several of them up here--wherever they could find room for them.

Q. And the water power ran all of this!

A. Right! Well, then the wheat--that scale was a work of art. It was just a hand made work of art. It's just a shame that it's gone.

Q. There's no pictures or anything of it?

A. I don't think so. And then the wheat went, after it came down out of the storage bin, it came down, well it went through a finer scouring and cleaning system, a scourer outfit and I can't remember how that worked. It was up in the second floor. I just don't remember how that worked. After it came down from there, it went through the first roll. And those rolls were like a foot in diameter and there's two of them that rolled towards each other. And on the first stage one of them had corrugations in it, and it was set a little way apart so that the wheat berries would go through there and one roll would run faster than the other. And it had a tendency to flatten the husk on the wheat, the spidermus of the wheat, it kind of flattened it out and peeled the flour out from the inside of it. Well, then it left from there to a revolving screen with silk on it. And it was a hexagonal wooden frame about 12 or 15 feet long, and the mashed wheat from the first set of rolls went into this screen and the screen was slightly out of horizontal and it revolved and the flour went through the silk screen and the coarser stuff, the bran and what not went on to the second stage of rolling where they used smooth rolls that were set

closer together. And then, I'm not sure, but I think second or third stage they, well, I can't remember now whether the bran went--what you ended up with is flour, bran and middlings. And the bran was the outside of the wheat berry, the epidermus, and the middlings were the germ in the end where the sprout came from. And then you had those two items besides the flour. And I can't remember whether the bran was extracted after the fourth stage or whether it was taken out--but I'm sure the middlings and bran must have been taken out before the last stage, but I really can't remember.

Q. Now where was that done?

A. Well, the rolls were on the main floor and there were four of them. They were cast iron frames with these rolls across set in babbet bearings and wooden panels to enclose the whole works. And after it went through the rolls it dropped down in the basement and elevators picked it up to go to the second story to go through these silk screens and there was one of these screens for each set of rolls.

Q. Now what do you mean by elevators?

A. They were square spouts about so square (gestures about 8 " by 8") made out of wood and top and bottom was a wheel and leather or fiber belts went over these wheels with metal cups bolted into the belt. And there was a lot of them.

Q. Did it go into a big bin and then it scooped them out of there?

A. Right. Well you had two legs, they called them legs on an elevator and on the bottom was the boot. You run another spout into the boot and as the cups come along they picked that stuff up off that spout. You know, use it for wheat or grain or flour, middlings, everything went into these elevators.

Q. And all of the big hoppers were down in the basement?

A. Well, they really weren't hoppers, they were just--I'll have to draw you a picture! These elevators looked like that. (See diagram) And I imagine they are common today, but they are all built out of wood and they usually had kind of a hex shaped bottom on them. And then in here you had a wheel. This isn't drawn correctly but the belt run down over this wheel like that and you had cups, metal cups. And I suppose before they had metal they had to whittle them out of wood. In fact, I'm sure I've seen some wooden ones. And originally they were probably leather belts, but in my day they were mostly fiber belts. They were factory-built belts. Well, then you had a spout coming down here from the rolls or whatever and it just dumped into this boot. These were called legs; this was called

a boot here. And the spouts, these legs, they were just hollow boards, you know, like that, square. And the belt went down one side and those cups were just fastened to the belt.

- Q. Oh, I think you can still see some of those. I wondered what they were. And that's how they raised it.
- A. Every machine in that thing had one of these elevators to go with it. Stuff went down by gravity but it had to be elevated back up.
- Q. Things must of been going all over the place!
- A. Oh, yeh.
- Q. How many people did it take to operate the mill?
- A. Well, it usually was operated by one person!
- Q. One person!
- A. Yes, the flour mill could be operated by one person. You got the mill going and you set the feed on the rolls to the proper feed and then the guy had nothing much to do; you'd check it once in a while. But then he was bagging flour! We had a bagger for fifty pounds and one for twenty-five pounds and one for five pounds. Everything went into a paper sack.
- Q. Somebody would bring in flour, then, and it would run until they had ground that--
- A. No, what they did, they had flour ahead of time. All they did was exchange milled flour for the wheat. It depends on business, you know, when things are slow one person could run it and in fact when there was quite a demand for flour they used to have a person running it at night. They used to run it all night, if there was enough water and enough demand for flour. A person could run that all night. Now he didn't have to mess around with customers and so he was just running the mill and bagging flour all night. But during the day, it was pretty hard to wait on customers and bag flour, so usually there were two people there. And, also, there was a feed mill in there; the farmers brought in feed to be ground. My dad always figured that the feed mill would pay wages for two or three people and that the flour mill was profit.
- Q. Did it make a lot of noise?
- A. Yes, expecially when the feed mill was going! The feed mill was two plates about like this, corrugated, and they were run together like the old stone wheels, only they were made out of steel. And they run fast! They made quite a racket!!

- Q. Did that run off the turbine?
- A. That run off a separate turbine, it had it's own turbine, water wheel. Used to call them water wheels.
- Q. So there would have been two of them down there.
- A. That's right. Only the feed mill was added later and they made a chute out of the bottom of the flume so it came over and down into the feed mill turbine. And my dad always complained. He said it was a pretty inefficient rig. He always wanted to change it but he never did, because it would cost too much money.
- Q. I can see it's painted in this picture. Do you recall--
- A. We never painted it. In all the years I was there we never painted it. It was painted, but we never painted it.
- Q. Was it sort of greyish, then?
- A. It was grey colored. But it would cost--you know, there wasn't much money in it. We made a living and that's about it. Now before my time, they made money there. But in my time we made a living. And then when the war came along and my dad got a chance to get out of there, why he just left.
- Q. I understand it was something of a gathering place for people to go.
- A. Well, they used to come down there and fish and swim. Farmers would come down and sit around the office on a winter afternoon and shoot the breeze. They used to have a big pot bellied stove in the office there that they'd burn cobs and wood and one thing and another.
- Q. Corn cobs?
- A. Yeh, corn cobs! As long as they had them why they used to burn corn cobs. Ah, they'd sit around there and spit on that stove, I'll never forget that! They had a spittoon there, too, that was pretty rank!
- Q. I'll bet!
- A. In fact, I don't like spittoons--at all. I never forgot those spittoons. But when they weren't using the spittoon, they'd spit on the stove.
- Q. That was in the office.

- A. Yep. That was in this office over here. (Refers to photo of mill; points at end section.)
- Q. That would of been this part, right?
- A. Right. Before this piece was put in.
- Q. So then there was machinery on all three floors.
- A. Well, right, you see there's three floors, well, there's four, counting the basement. There's the basement, and then the main floor and the second floor and the third floor. Now the third floor, there were two or three reels up there, but I think they were used for rye flour. We had a separate mill for rye flour and one for buckwheat flour. And also there was a corn sheller in there and they used to make corn flour. Over on the south side they had these little mills, they were just single mills, they weren't as elaborate as the regular white flour mills. But they made corn flour, rye flour, and buckwheat flour. In fact they used buckwheat flour in the pancake flour; they mixed it with the white flour in the pancake flour. They used quite a lot of buckwheat. In fact dad used to buy buckwheat, they didn't raise enough around here, and he used to buy it and it would come in by the car load and we used to go down to Chesaning and load it on the truck and haul it out there.
- Q. By mills, do you mean those rollers again?
- A. The rolls, yeh. There was a set of rolls for making rye flour and there was a set of rolls, maybe two sets, for making buckwheat flour, I've forgotten now.
- Q. I wanted to ask about the scales again, you said they were really quite something and that they were hand done?
- A. The scales were actually a box with a sloped bottom and they were probably four foot square and it all was made out of wood. And it had a beam, you know, a scale beam, and that was wrought iron, hand made.
- Q. When do you think that was made?
- A. Probably was made at the time the mill was built. The time of the civil war. You see everyone of those operations had at least one spout, one of these elevator deals, and some of them several. These elevators were in banks around the place.
- Pause
- I could roughly sketch out a floor plan of the main floor.
- Q. You could! I'd really appreciate that.

- A. you see that water wheel, now this is in the basement. This is second floor, or main floor. But this thing is down in the basement. In fact, it is below the basement, it's down in the bottom of the river! And it had a shaft come out of the center of it that came up about so high off the floor (couple feet) in the basement. Here's your water wheel (refers to diagram) and it had a shaft coming right out of the top of the water wheel. On top of that shaft was a spur gear--how do you draw a spur gear? And then there was another matching gear and you had a line shaft go clear across here. AND all this machinery was run off that line shaft. The whole works except for the feed mill over here where they had a separate wheel, but it was down here outside the flume and it had a spout over to the turbine for the feed mill. But all this machinery in this mill was run by that water wheel right there. Off this line shaft and you had a whole mess of pulleyson that line shaft and belts to drive, well actually the belt could drive an elevator for instance, that went up to the top floor and that elevator on top could have a chain on the top of that elevator to another machine. Anyway, when you started that water wheel, opened that water wheel up the whole mill started from the top floor right down through into the basement off that one water wheel!
- Q. Did they move belts around to have different machines work?
- A. If you weren't using a machine like this rye mill, if you weren't using that thing, you'd just run the belt off the pulley.
- Q. But generally speaking, when you started the water wheel, the whole mill, all of a piece, started.
- A. Right. When you started that water wheel, what you were doing 99% of the time was running flour through the main flour rolls.
- Q. Now where was the wheel that started the water wheel?
- A. Well, it was right above it. Right to one side here, about this far off the floor, on the main floor, was a big wheel, about this big around (gestures several feet in diameter) that you turned. And that turned a shaft that went down to one side of this housing and it had a little spur gear on the bottom which operated a scroll affair around the outside of this casing which opened these little doors. So that the water went in around the outside of this thing. And the water went in so that it would hit the wheel at an angle, besides going down. When the water went through that casing, it had a tendency to hit those blades on the turbine--velocity, besides going down through and giving the wheel a kick as it went through.
- Q. So it was very efficient?

A. Well, water power is efficient because it doesn't cost so much. But nowadays it's so unreliable that you don't--except in big power stations, you can't afford to mess around with water power.

There was another thing. Sometimes, if you got some dirt through this rack and it got into those little gates you couldn't shut the darn thing off!

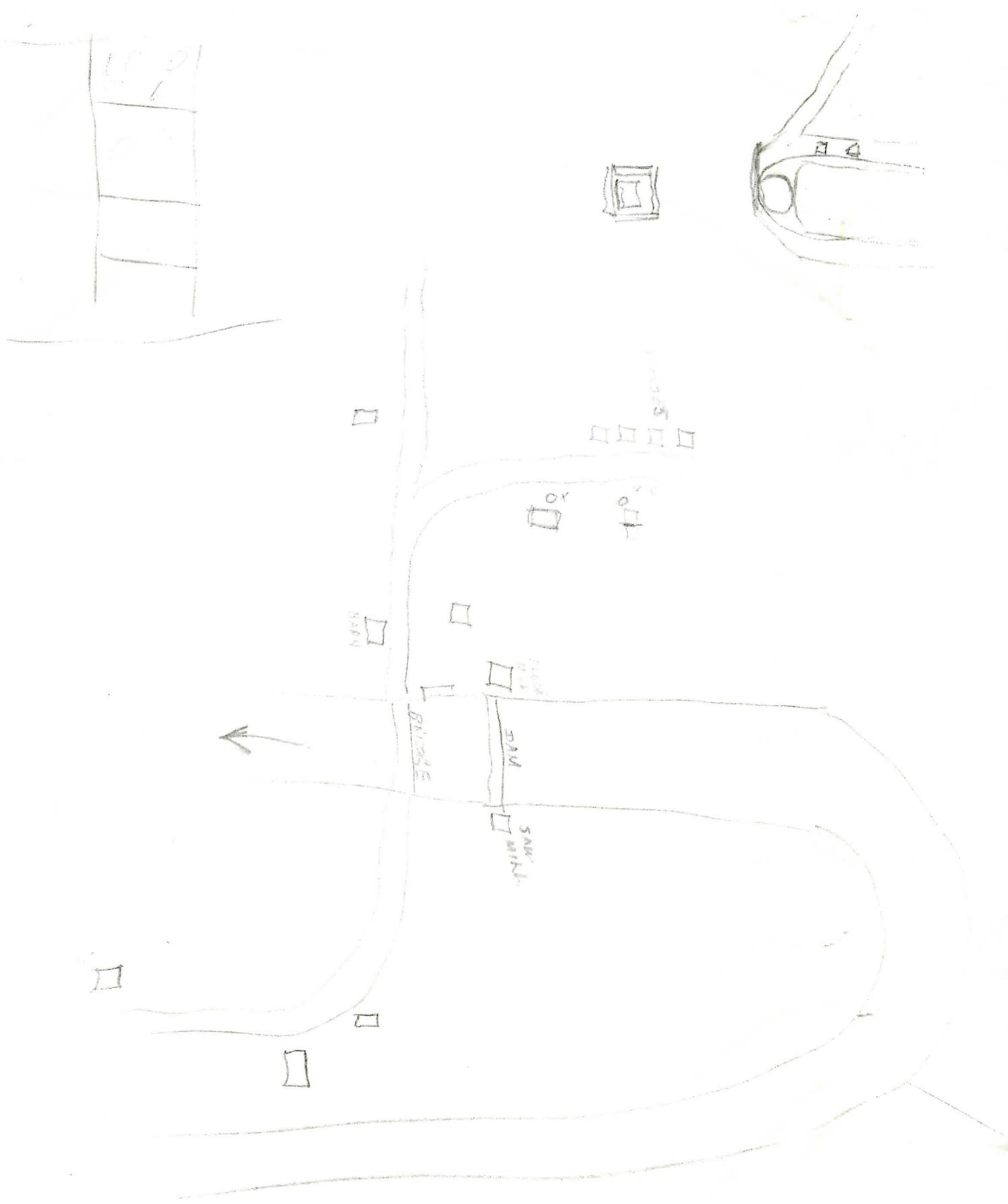
Q. Oh, no! Well, what did you do then?

A. Well, they had troubles! (Chuckle)

Q. Did they have to do down there?

A. Uh, one thing you could do is put some boards down in there and block the flow.

(Unfortunately the tape ran out here--but Mr. Parshall mentioned that they could also take the belts off. Mostly they waited until the dirt worked its way through or if it were ice until it melted. He also mentioned that occasionally a muskrat would get caught in the smaller turbine that ran the feed mill. But that water wheel was too small to work the animal out and someone had to go down and scrape him out!!!)



Map of Havana

