

Tippett

Transcript of Ralph Maki Interview with Mary Tippett Andes 6/27/94 at his home at 522 West Division Street in Ishpeming.  
(partially transcribed by Rebecca Tavernini 8/14/94. Tape 1, side 1, and some of side 2)

**Let's start by having you put your full name, first, middle and last, or if more than one middle if you have more than one middle name, and the date you were born and the place you were born.**

My name is Ralph Gus Maki. I was born January 29, 1915, born at home, wherever we lived at the time. I was born at Humboldt.

**Can you give me your parents' names, first, middle and last, and their places of birth?**

My mother's name was Lempi Marial Kuliuu. She was born eight month, the twelfth, 1895. She was born in Evilett, Minnesota. My father's name was Emil Matthew Maki, born eleventh month, I don't know the date, but 1890. He was born in Mayry Vassanynen (?) Finland.

**Do you know the circumstances that brought your father to the United States and about when that might be?**

My father came to this country in 1907. The only thing I know about my dad really, is he was the only child in the family. And why he come to this country, as far as I know, was for work. I just don't know any more background than that.

**What were your mother's and father's occupations?**

My mother was a housewife. My father when he come here he first worked in some pulp woods, then he started in the mines. He worked at the Barren Mine, then he come to this country and worked in the Salsbury Mine and from there he went to the Barnes & Hecker. And that's where he got left—in the Barnes & Hecker.

**I would like to talk just a little bit about your father's death in the Barnes & Hecker. How old were you when that happened?**

I was 11 years old at the time. My father was 37 years old.

**How long had your father worked at the Barnes Hecker before the cave in?**

I don't think any more than about three years—two or three years. It was a new mine and they shifted some men from CCI to down here to the Barnes & Hecker.

**I know you've talked to other people about the circumstances surrounding the Barnes Hecker, but I guess I'm curious about you at that time as an eleven-year-old boy. What kinds of things do you remember about the impact on your mother? And what happened to you? Did you have to go to work? What was the aftermath of that for the family?**

I was in sixth grade at the time. After school in them days you came home for dinner. It must have been about 11:00 or so and I came home, had lunch and went back to school. Nothing seemed to be out of place at the time. But about 3:00 in the afternoon my teacher come and told us that something's happened at the Barnes & Hecker mine. And right away I said "my dad works there." She didn't say anymore. When I got home a lot of my relatives were there, my mother's sisters and brothers, and they were all crying. And that's when I really got to know what had happened. At that time, it was the next day, none of us kids went to school. One of my uncles, my mother's brother, took us to the mine, the Barnes Hecker mine, that day, and there were so many people there. I remember that the state police were watching who's coming in and who's going out of there, and kind of directing traffic. There were some people crying, especially the wives of the men that lost their lives. There was so much crying going on it was just pitiful. It really got to me and I was just 11 years old at the time. It just was a terrible thing to see at *that* time. But at 11 years old you forget a lot of that. A lot of time is involved there. After, Red Cross came there, Salvation Army came to see us, I think we got more help from our minister and his wife, Reverend Hillala. My mother just about lived in church with us kids at that time. And they were over at the house lots. The grocery store owner, Mr. Rosburg, was a very good friend of my dad at the time, and Koski's store, too, they donated lots of food to us because the money just stopped for awhile until the compensation started coming in. So that relieved the stress a lot at that time, if I remember right. Then when the money start coming in, as far as the compensation—the state paid \$14 a week in compensation and the company added another \$14,



which was \$28 a week, for six years. Well, you could live off of that. My mother, not too long after, she bought a house down here on Cedar Street and that was the family home from then on because we lost a brother at two years old in that house and then we lost the father while we were living in that house and my mother said we got to get out of this house, and we did, as quick as we could. So that's where we actually lived after that then—when the Barnes & Hecker went down.

Actually, I was born in Humboldt, and we lived in Humboldt, Diorite, and then we moved to Ishpeming when I was five years old. I started school then. I couldn't speak a word of English when we got here (*laughs*).

**So you learned English after you started Kindergarten?**

Yah. Right there, we had a lot of help from this teacher.

**Do you have any guess of how many kids there besides you who only spoke Finnish before they started school?**

How many other kids? I just can't remember that.

**But you weren't the only one?**

Oh I weren't the only one, no way. My oldest brother, he was the same thing—he only spoke Finn. There was time when my dad was living, afterwards we started picking up the English and it didn't take long then. My mother was born in this country, so it wasn't too bad for her. She still spoke fluent Finn direct to the end(?).

**I think I'll ask you about your other family members when we get to the other part of this tape, which is on your personal life, but now, at some point the compensation ran out. Did you have to leave school and go to work?**

Yes. Compensation ran out in 1932 and that's when I quit school. I was in eleventh grade (my oldest brother quit school in eighth grade) and tried to hussle up some jobs, mostly out in the woods. It wasn't exactly when I quit school. My brother and I got a job with the WPA at that time and finally he went out in the woods. I went after then for a job at WPA, and they give me his job. I was working under his name for a time until one of my neighbors was an investigator and they fired me. I tried to get money one or another. From then on I went in the pulp wood, in 1933. In Humboldt I had an uncle there, in the Pesola family, and he took me as a son. I spent summers there making hay. I'd come back to town and maybe work off a

[Work  
Projects  
Admin]



water bill or something, before the city made me do it. He was in the logging business too, plus a little farming. Got a truck in 1934, a Chevrolet, a short wheel-base truck. I always did like to drive truck. Before that (I have to go back) I spent one winter at the lumber camp. A dollar a day and board. Cut pulp, hauled pulp, about whatever goes on in a lumbercamp. The food was good but the pay was lousy.

**Let me ask you a couple of quick questions about that. This was during the winter? And I want to know where the lumbercamp was, and if you can give me a feeling of what it was like to be working in a lumbercamp through the winter months, and what you stayed in?**

Well, I'll tell you, it was between Humboldt and Republic, actually in Humboldt township. And we had to walk in maybe about two miles to the lumber camp and then we stayed there a week at a time. We'd come back out of there, for like Sundays. They had bunks in there and there was about eight, maybe ten guys working there. It wasn't a big lumber outfit. I worked one winter there. It was tough, it was tough working in there. From there I went to another camp, from my uncle's, driving truck for Makela. He was a big logger. I drove truck there for about two summers before he got it all logged out. All hand loaded, unloaded by hand, into the railroad cars. I had a helper. We hauled two and half cords on a load and five cords a day—that's about all we could do. My aunt would load up my lunch pail so good with food, and big gallon jug of rootbeer always. I made a few bucks there.

Then in 1935 I went down South<sup>here</sup>hire(?) cutting pulp for the Swanson brothers. They logged out a couple forties. Got a cent and half a stick. Cut 100 sticks and got a dollar and a half out of it. That was tough, too. Thinking back again, you know, you're full of energy in them days. And you could do it.

\* From there I start going after CCI for a job, 1935-36. My brother had already got a job there, because they had promised all the kids that were left orphans from the Barnes & Hecker where our fathers got killed, they promised us all jobs eventually. But the mines were just starting to get going. So I was after Bill Nault here at the Cliff's shaft. In them days your captain could hire you—it ain't like today when you got to get through certain things before you get a job. But anyway, Captain Alpee said, "You



come back in about two weeks and I think I'll have job for you." Well, I had hopes there anyway. My mother was so dead set against us going into the mine. But I couldn't wait. I went to the big office over there and I said I've got to see Mr. Elliot. And boy, talk about a job to go in there and see him! Finally they escorted me in there and there he was sitting behind that big desk. He had a very rough voice. (*Imitates voice*) "Well son, what can I do for you?" I told him the story then, that my dad got killed at Barnes & Hecker and you guys promised a job for us. I says it seems I got fired from the WPA and maybe because, well I don't know if I was Democrat or Republican, because politics took care of that that time, too. Well just then Mr. Bolton came into his office and he said, (*imitates voice again*) "Mr. Bolton, have you got a job for this boy?" And he says, "Yeah, I think I got a job for him, at the Lloyd mine." Worked one week and off a week that whole summer, and from then on, that winter I went underground.

*(This is correct) gha.*

The first day for the company, they give me a snow shovel. Me and a buddy of mine I went school with (he got a job that same day too as I did) hanged the gondola ~~(X)~~ of coal, soft coal. There was about 40 tons of coal in there at least. And they put us one at one end and one at the other end and they told us that usually two men shovels this coal out of this car in one day, and hey, could we do it? I found out afterwards that he didn't like Finlanders in the first place, and the two of us were Finlanders (*laughs*). And after that, every time I just hated to go to work because I knew I'd get the worst jobs there was at that Lloyd mine. They was building that dry, they had blasted a rock basement down there and they put me and another guy to hand <sup>muck</sup> ~~mark~~ that. And then they got me doing cement work there, laying floors and the foundations. Aldus(?) Swanson was the mason there and he was kind of related to us. He married my mother's cousin, so he knew me good. He said, "Ralph, you don't have to push that big wheelbarrow, you come with me." So I was up there one day and the surface boss would come right up and say, "Get back on that wheelbarrow." What could he do and what could I do? Just go back there. Them are the tough part of life, you know. Then they put me in the ditch they were digging, with big rocks, and then they put me in the timber yard. I was glad to go on their ground work crew. But money was \$3.52 a day. That's what we got. Twenty-five cents an hour or something like that.

*X*

**A couple of questions before we go on. You said the boss didn't like Finns very much. Were Finns the only ones he didn't like or did he have things about other ethnic groups he didn't like?**



I think it was the Finns? I didn't mention the boss's name, did I? He was a frenchman anyway. They nicknamed him "horseface." He looked like one too. (Them things you can rub out of this too!) Anyway, especially when we shoveled that coal car and we were so full of coal dust, and sweating, and it was a hot summer day because we were piling coal for the winter, you know. We went to the timberyard then. My partner was Hank Racine, a big guy. Every time I see him nowadays, I say look how big he is and how small I am—but I'm the one who did all the work in the timberyards! *(laughs)*. I see him quite often, and once in a while we still talk about it.

**You said that you were glad to be able to go underground at the Lloyd. Why?**

Glad? Well for the reason there was a little more money in it, and what I told you about working on surface. But I'll tell you I worked all that summer and in the fall I got put down by the hospital (CCI owned the hospital) and I worked there maybe about two, three weeks, cutting windows and fixing storm windows for the winter. It was in the November month when I went underground.

**Before we go forward and talk about underground at the Lloyd, there was one other thing you mentioned that I'm a little bit intrigued by, and that was you said you had to work off the water bill. If you couldn't pay the water bill, the city or somebody would make you work off the bill. How did you do that? And how common was it?**

Well mostly it was the wintertime when there was work snow shoveling. We went around shoveling snow into the truck. They didn't have plows then. It only took about three, four days to work off a water bill. That was my job—to work off the water bill.

**Big change from now days.**

Oh yah, terrible *(laughs)*. A very big change.

**Might not be a bad idea to reinstate that plan for some people. OK, let's talk about going underground at the Lloyd. You would have been about 20 years old when you went underground then?**

I was 23 years old

**Do you remember your first day at the Lloyd?**

Oh yah. We got there about an hour early. Me and Mel and Toby Hoyum. He had a Model A and said, "I'll pick you up Ralph." He got the job the same day as I did. He was underground, but I had to work on surface. Anyway, we got there an hour ahead of time and everything. Put the old boots on and watched the other guys how they dressed, and we dressed with them. Then for the day shift you had a lamp. Afternoon shifts and night you had a carbide light. You had to know how to fix them things up and light them up.

**Describe that would you for me, the carbide lamps.**

It's about yea high and you screw the bottom of and fill that with carbide.

**You need to give me dimensions in inches, if you can, for sizes of things.**

Oh I'd say about five inches high, and the bottom would screw off and you'd put the carbide in there. Then on top there's a little top you fill that with water. When the water hits the carbide, it forms a gas. There's a flint there, and you would strike that flint and light comes out. And that will last maybe four or five hours, then you have to reload. You'd carry a pack of carbide on your belt there and you always had a jug of water. A lot of times when there was ever any kind of air, a blast or something—a concussion of air—it would blow the light out and you'd light it up again. But you got so used to it it was no problem.

**Did it have a flame that came off the top?**

Yeah, an open flame. I wasn't mining at the time, but you didn't supposed to light their fuses to blast, but you'd light them with that carbide lamp.

**Tell me what the bag looked like that you carried extra carbide in.**

It was a metal bag and it had to be dry. If you got water in it right away it'd make that gas. Even when used to take that carbide home and set it out with some cans and light it and pew! that can would go about 100 feet sometimes if you put enough carbide in there.

**How much carbide would it take when you were at home and made the can fly up in the air?**

*(laughs)*. I'd say maybe about two cupfuls. And my golly, you could blow a can way up there.



**So it was like in powder form when you put it into the lamp?**

Yeah, it was little chunks form you'd put into the lamp. If it was powder it didn't want to work. It had to be kind of dry, like little rocks. It was quite a thing, you had to get used to that. Carbide lamps, you know, are really on the market now, in antiques—really good money. I don't know how many I had at one time, but I threw them away.

**Where you ever in a place when your lamp went out and you were in the dark and you had to relight?**

Yes, many times (*laughs*). But you know how to do it automatically. That flint in there would light right away, if it was in good shape. What you had to do sometimes was poke that hole with a little pin and make sure it's open. It was something you got to had to catch on to.

**If you were in a place that was totally dark, about how large an area would your carbide lamp light up?**

I would say only about twelve feet maximum. We did have electric lights down there in certain places. The tuggers were run by electricity and you had to rely on lamps to show your drifts or your linings. But when you were up in a raise or someplace you depended on that on that carbide.

[A high-wheeled cart for carrying ore?]

**Before we digressed to carbide lamps we were talking about your first day at the Lloyd mine. Do you remember what the very first thing they assigned you to do underground was?**

That's a good question. There was a load of lag that had to go up. And the boss told us to go over there, there was two of us at the time, he was greenhorn like I was. He said, "They'll send a rope down and you tie up a bundle and holler through a pipe up there, 'OK, hoist up!'" We didn't even know how high they were. **(End of tape 1, side 1)** We hollered down not to put so much lag, and they counted about a dozen to fifteen, and I think we had about twenty to twenty-five on the first one. From then on, pretty soon they brought in a truckload of timber and we hoist one timber at a time. That worked and we were classed as timber hoisters at that time. That's about all we did. Then the boss told us that if we had a little time there's a shovel there and you can clean up the track or whatever. Keep yourself busy, that's all. From then on, I was a brakey on the motor and we were hauling the dirt out and I found out that I wanted more money and wanted to get what they call a company account, where they pay the miners even if they don't make any footage or too many cars out. They'd

[Support framework for the drift]



(Interviewer note: "miner" is actually a job classification. "go mining" means acquiring the title miner paying the account wage + a bonus by the foot or "footage")

pay this company account wage which was \$4.88 a day. I only spent about six months and I said I've got to get mining. There's where the money is. From then on once I got to be a miner, and they broke me in (I got a pretty good partner who broke me in), it was nothing but steady mining for the next 30 years.

**I'm going to back up a bit and get some definitions of words. I already have some these, but I like to ask everyone because they always give me a little different twist on it. What is lagging?**

Lagging is mostly made out of split cedar log, about seven feet long, which is put on the sides of the drift and the back to protect you from any falling ground. It blocks up any big side or hole or anything—it's a safety thing for you, and it's a must in that type of mining.



**What's the back?**

The top of the drift. You have two timbers and a cap for the sides and back of the drift. **Is the back more like a ceiling?** Yah. More of a ceiling, where the pressure comes down from. Mostly you have the wood gob coming down. Twelve feet down you mine around in slice mining and then you blast everything down, then you go down another twelve feet to mine. It's the wood gob [split cedar shoring] that's left up there. The more that cracks and groans, the safer you are. If there's no noise at all, then something has been left hanging [hasn't been blasted down] and if that should drop [there's the possibility of an accident]. The Lloyd Mine was a pretty safe mine.

**What's a brakey on a motor?**

He's the guy that throws the switches and then when you get to the chute to load the cars. **How long did you do that?** I did that about a month or two. I spent only about six to eight months there before I went mining.

**We know that everyone who works in a mine is not a miner. Describe what your work processes are when you get down to your work place. As a drift miner, a stoke miner, or what? Let's start with a drift miner.** That's bringing in the drifts. First you make room into the ore body with timber shoring--two legs and a cap, 9' x 9'. You drill and blast about five feet, get the dirt out, set up your timbers and cover them with lagging for safety and you keep doing this process for a long ways continuing in a circle until you bring that first drift in. Then you cut off from there and follow the other drift beside it and let the first drift cave in with all the timbers and everything. Sometimes when you get these drifts open you drill and blast all of the timbers and let that whole wood gob come down. Most of the time you'll cover it with what you'd call 10' tamarack poles. When you get down below that drift and begin again, you have all that wood gob as protection [from further cave ins]. It's a process that is a lot of work, but that's how it was done.

*(Stoke, not stoke) Th.G.*  
**Why would you blast and have part of it cave in?** For safety. To get that wood gob down and settling down right from the surface. It was better to blast it down otherwise it would crack and groan and eventually the timbers would be smashed because the wood gob is so heavy. Sometimes it got so small you had to crawl into your traveling road with your bag of powder. It's hard to explain what goes on. One time we had brought in a drift with two gangs--one gang drifting one way and the other gang drifting the other way and there was only one traveling road out of there plus a 100' raise down to the next level. All of a sudden all the old cribbing [shoring] in that 100' drift started cracking down and the whole drift caved in. Otto Swanson was mining with the one of the gangs and he was going to jump in the raise. I grabbed him by the collar and said, Otto, don't jump. Nothings going to come. We got a wood pillar there that will [protect us]. If he had jumped down that 100' raise he would have killed himself. The drift finally caved in only so far and we crawled out of there eventually. What happened was we were scraping over the ladder road--there's a ladder road going down to the level plus the dirt chute but that was covered because they were scraping over it. Like I said the wood gob gets so heavy that it [falls of its own accord]. They finally quit stoke mining at the Lloyd Mine, and once you went to the Mather A it was all together different mining--cave mining.

**Can you paint me a picture of what a wood gob looks like?** Well, when you first go in (like at the Barnes & Hecker) with your level into the ore body, then you go up as far as the ore is and you start mining that out. The more wood gob you leave up there--the timbers that you use for your safety--after getting the ore out, then you drop down 12 to 14 feet in the raise, you cut everything open and you start another drift. Now you have [above you] all that wood that you put--lagging, timber and poles. You're hoping that everything will cave in right from the surface and get the pressure on the wood gob. That's what didn't happen at the Barnes & Hecker. They had made a wood gob pile at the top level but there remained a big hollow and puff, it came down. I know that's what happened. But they were so hungry for the ore at that time because the mines had just started



up [and the demand was there]. To me it seemed like bad engineering. At the time I just thought things like that happen but once I got underground I could see what happened. I have an article in the *Red Dust* about that. When they had the inquest here in Ishpeming as to what happened at the Barnes & Hecker, your dad gave me the information about the interviews made with all the big wheels from different companies. They didn't have any miners come [to the inquest] and explain [what might have happened]. Miners from the other shifts could have said but they had a jury there and I'm still trying to find out who was on that jury. I probably would have known some of those people. They said the cause of the accident was "unknown." That's all they came up with and they wouldn't go into detail. They all said that wood gob was so beautiful in there and they thought it would cave itself but it never did. There was left a big hole and then there was water and quick sand, big rocks and so forth.

**Were still talking about the Lloyd Mine. I understand it takes a while for a person to learn to handle the dynamite and to set the blasting pattern, to do the drilling and all that. Can you tell me a little more about the process?** The drilling part is the first thing. You have to know how to space your holes. You put your primer into one stick of powder and put that in. Depending on soft or hard the ore is you put in from 3-5 sticks--in some of the drifts we would put as many as 10-12 sticks. Then you cut your fuse as to which holes you want to go off first. In slice mining you have the one side mined out already so you blow it that way. You put the lead cut in there and get the center out first. I learned that the first holes should be drilled downward and the last holes drilled upward. If the first ones were to be drilled upward the timbers plus the sprag that hold each set of timbers up might come down. In hematite mining you don't use that much powder, only when you go into rock drifts. Most of your shafts are in rock and your metals are in rock and then you get the ore body and that's where you start the mining. Slice mining was cut out with the Lloyd Mine. Because if they didn't come down from the surface right you're in trouble. All the cave ins and the sink where the Negaunee Mine was is all slice mining.

*Stoke Ma*  
**I'm not sure that I understand exactly what slice mining is. Can you give me a better definition as <sup>to</sup> aid how it's different from the other type of mining?** You mean slice mining different from the other mining? **Yes.** Most or all of the ore is taken out of an ore body because you're going with the pattern in slice mining. [Whereas] in stoke mining or cave-in mining you drill holes and you're just hoping it will starting caving by itself and pretty soon it starts caving into some rock and you're losing a lot of ore. Mather A lost a lot of ore on account of that--it just didn't start caving in. Stoke or cave-in mining is a quicker way to get the ore than slice mining. But the danger is the same for both. You still had to blast, blast the raises up and you had what they call long-hole drilling. You get paid by the foot there and then you blast them with sticks of powder two feet long and two inches thick. You certainly had some noise. Once it started caving you didn't need miners there anymore, just scraper men--the dirt keeps coming.

**When the miners were setting charges, could you tell by the color of the rock what was ore?** That was the engineer's job. When they diamond drill it they know just the size of the ore body and they have maps so they know just where to go. You know when it's rock. **Did an engineer work with the miners in all of the contracts?** Engineer? No, no. There may be one engineer who takes charge of the whole mine and he has helpers who go around doing the measuring and that. Then your captains and bosses carry maps and they carry compasses and take a shot to see if you're going in the right direction. Everyone got their job to do.

**Tell me what a set is.** A set. I told you about these timbers--two legs 9' and then you got a 9' cap. That's what's called a set. After you've blasted five feet, you put the set up and sprag [a wood prop to support a roof or ore] it to the last set you put up. And you make sure you do a good job because if you blow that cap off, you have a mess. One time at the Mather A, I was the lead man in a rock drift and the last shift said they had blasted but when we went down there were 17 steel sets down. It took us about a week before we could clean that up and get into the breast of going ahead again. I tied into that shift and asked them, "What in the heck



kind of miners are you, anyway?" What happened was after they opened up they started blasting the holes up which eventually blows everything down. The guys were Art Nault and "Two-shot" Tippett, ever hear of him? **Why was he called "Two-Shot" Tippett?** Something about hunting. I really never did learn why they called him that.

**What was the dry at the Lloyd Mine like?** The dry? Well, one side of the dry you kept your digging clothes and the other side is where you showered after work and put on your street clothes. My mine clothes were washed about once, maybe twice a week. I had a partner who would change his work clothes three times a week. I asked him, "What are you changing three times a week for? You're hardly getting dirty." He said, "Well, I can stand my smell but I don't want you to smell me." I had a partner once who washed his clothes only once every six months. He was a hard worker but when he bought a new set of clothes he wore them until they rotted off. He wasn't the only one.

**How long did you work at the Lloyd Mine?** I worked about nine years and during the war. The mining company naturally had a priority because the ore was needed and so I was deferred for that reason. I heard Detroit was looking for men and I kind of wanted to get out of the mine. I went to two different doctors and finally Dr. Corkin said, "Ah, yeah, I'll get you out of the mine." I got a discharge--old Marjomaa the superintendent was mad because I wasn't the only one who left. I went to Detroit then in 1944 and stayed with an aunt and uncle (my wife had a sister) and looked for a job. I had a choice of going to work in the foundry or get drafted. Well I said, "I'm not going from a mine into a foundry." I had two cousins in the Merchant Marines and so I did too. Was that a experience. I went to school in Sheepshead Bay in New York for six weeks or so. They wanted to give me more schooling but I wanted to go sailing so I finally got on a ship. We were in the north Atlantic and the waves were 20 to 30 feet and there were 200 ships in the convoy. The U-boats were there. I took four trips across to England. I was married, had a wife and kid but she never said, "Don't go" so I thought I'd make a little money. **Do you remember what your pay was in the Merchant Marines?** In the three months it took to go over and back, I would make about \$600-\$700. It wasn't that much, even then. I was gone a total of two years. After being home a couple weeks, I reapplied at the mine and Sundberg hired me right away. Next day I was working. It was no time at all and I was back mining again but I was in a developing crew with four men on drilling machines (called a jumbo) and one man changing bits in a rock drift bringing in the main drifts. You had to wear running shoes to make sure you got enough done in one day to make money and we did. First we had a five-man crew and we made so much footage, they cut one man out. We still ponyed out just as much with the four-man crew with bigger machines and then we became a three-man crew. When they came out with the carbide bits we could drill longer than with the regular bits. The blasting was done electrically and you couldn't count the blasts because they went so fast, but you had to make sure they were all done. One man works the Conway loader with bucket, goes into the dirt pile, puts the dirt on the conveyor belt that takes it back to the ore car. One man would be on the motor of the ore car and he would take the full car and switch it for an empty one. I enjoyed the work but figured I was in rock too long and I asked the captain to be released to do something else. The second captain John Buren told me I could get out tomorrow if you want to. So I went back to stoke (ore) mining. It's like a family with your partners. Everything goes like clock work and everyone knows what to do. You had to make a good blast everyday to make any money and we made it.

**You mentioned footage and you mentioned company count--can you define those for me?** Company count is a guy who is a spare miner who can be placed anywhere he's needed. The base pay is that of a miner. In the rock drifts you got paid by the foot. Every 15 days the shift boss or second captain would come and measure to see how many feet you had and they'd put a mark where you left off and then measure again. They were satisfied with the footage we were making although there was no set amount. I had to report to the boss if we had footage or if we had to work on a break down.



**When you were doing rock drifting, would you get company count plus footage?** Yes. If you had a break down, the hours were paid by company count. When you were actually mining you got footage pay. They would combine the two whenever you had a breakdown which would last sometimes as long as two-three days. For instance when I told you about the 17 sets being knocked down, we were on company count cleaning that up.