Tape 1012: Interview with Lawrence Amicarella.

March 10, 1973. Now, did you want to ask me some questions?

How do you sink a mine? Well, sinking a mine...in the first place, the surroundings have to be surveyed and drilled and the accummulation of the amount of coal in a certain area and your shaft, if it be a shaft, is usually sunk in the center or where a railroad can get to it. A shaft is sunk by these means, from the top down. The first 50 feet in the old mining law had to be cement, thereafter it was a double shaft which was timbered by a dovetail timber or a T formation. That was sunk down...every so many feet they sunk down, they had to put these timber in and put them down in a perpendicular with the perpendicular straight-edge. They were wedged in so they would not move and they were sunk by drilling with a jack hammer and blasting, probably 18 or 20 holes in each side of the shaft. Now these shafts are usually about 10 feet wide and about 22 feet long. In some instances they also had an escape shaft which was about 7 feet by 10 feet with a stairway in it that ran on 45 degree angles. See what I mean? Now a slope and a syncline, you put them down a little bit different. You put them down on a....if it is less than an 18 degree angle, you could use machines such as joys or any other machine that might load the dirt out . Usually in cases like this it would take about 17 holes in a circle. Now in modern day... today we use steel with cement butts on the bottom two feet thick and prior to that they had to be timbered and when you timbered them it had to be spragged by sprags from one side to the other, from one timber to the other, from one ledge of rock to another where the rock was extruded. But they usually shot down more than the amount they needed to make the room for timbering. Now on an incline which goes up hill, we used to go just the reverse from the syncline. We used to go up, we used to call them drifts, synclines, or slopes. It was

timbered the same way only it was a little more easy to do because all the material we shot came back down the hill. And that was loaded by hand usually unless it was less than 17 degrees. See? And drifts....we'd go straight in the hill, absolutely straight in the hill. You start from nothing, timber it, and when you timber a drift you put usually the sets....square sets, they called them.....they were cut so that a leg fit into a slot in the cross-beam and we lagged all the way around solid with lagging, they called it, which could have been 2x8's, 3x8's, or 4x8's whichever the ground required. And as we went down, when we hit the coal the first thing you do with the shaft is to go further down than the coal scene so you could make your places for the cages to set in. They called that the cage seat, probably 5 feet, some 8 feet, and from there we spread out to one side of the mine at a time. Probably one side....to handle the water there was a big sump, probably what? 50,000 gallons of water, or approximately, or more. It all depends upon the amount of water that the place was producing. This mine then went in....before they could justify any amount of coal to come out had to be drained and every so often they had a pump station. The water came out from underneath the coal or the roof and a pump station is just a little place outside of a cross-cut. And may I say before we go this far, a mine is nothing but a small city. Now that's the most important part of a coal mine. It is done by engineering where you have your streets and your alleys and cross streets. We called them entries, cross-entries, and cross-cuts. They usually, when you first begin, the cross-cuts or alleys are about every 100 feet and as they go in they get smaller until they get 'way back to the place where the mine has gone to the boundaries. In retrieving, these cross-cuts are sealed to allow the air to go up one way and come back through another.

Then in retrieving this coal, we start at the last cross-cut and we take one block out at a time by lifts. Probably a lift would be anywhere from 12 to 25 feet and a block consists probably of 100x60 feet. And coming back,

then, we take this out and, if possible, we make a fall so we don't have to carry the weight with us as we're extracting this coal. Then we come back and we start two of them like two blocks at a time, but we usually go on a diagonal so we don't a straight line to make one working coincide with the other. You get this straight, don't you? Otherwise, instead of going straight across these rooms here, we go from a corner, see. And as we go back, every so often we have a firewall built to keep it from catching on fire because you can't recover all the coal and gases form in there such as CH_4 or other gases and you've got to block them in. If no air gets to them then these have little chance of catching on fire, but if any air gets to them at all spontaneous combustion occurs. See. These places are done after we get to the boundaries. Now this is only one boundary.. When we go...say you go to mine these are extruded, north, south, east and west. They start from one side and then they start from another...say they start from the north, then they start from the west, then the south...so they don't all coincide at the same time. See. And, like I say, and then as you go in, track is laid, automatic doors is put there for the locomotives to come through, partings were built as we went in so that one does not coincide with another or they don't interfere with the other. And the air split.....each district of the mine has its own air split so in case of explosion, one side of the mine doesn't harm the other. See what I'm getting at?

Now we used to mine these places by hand. If I recall right, about 1918 tonnage was about four tons per man. In 1925 it was about six tons per man. In 1930-36 it was about eight tons per man. Then they got these mobile loading machines, joys and what not, and the tonnage went up to about 30 tons per man and then it slacked down, you know, on account of the pilern. And then it came about 1949, the continuous miners came in and then in some parts of this northern field we got as high as fifty tons per man and thirty tons was not extravagent to say at any time. And then, you know, as these mines deteriorated these mines

got less and less, you know. Because, just like everything else, they robbed Peter to pay Paul, they took the high coal and left the low coal. When the mines deteriorated, they had to go back to the low coal and it wasn't so possible then.

Then, you know, these continuous miners, the trouble with them now is that they made so much dust and the new mining laws say that you must keep suction blowers exhaust fans instead of blower fans like we used to have within 20 feet of the face. The problem is there that you have this dust in suspension all the time and you have to have rock dust to hold it down which does a pretty fair job.

And timbering.....there are several way to timber. Now timbering in a incline, you don't timber like you do in these other mines on a flat bed. You timber with reels. You probably put 20 props in a circle, then you move, oh, say, 6 or 8 feet and put another circle of props, maybe 20 props. Because when you shoot your coal down....see, you can't handle machines there.....these big chunks (lumps) of coal come down and they've got a bulkhead, see, there at the bottom of the chutes. One man loads all the coal one day and one driver, or one muleskinner, as they called them, and when these big lumps come down, if they hit that bulkhead which is only a chute.....it has a hole about 4 feet wide and 2 feet high.... they just knock it out and block the whole entry, air and all, so they use these creels. When the lumps hit the creels, it breaks the lumps by going back and forth, zig-zagging like a pinball machine. See what I mean?

And then there are mines where you have bumps, like in Utah. They don't have many in this state. Your props are put up against the rib and the bottom of the prop is starpened up so when this bump comes they get tighter and don't break because your bottom mushrooms. See, did I get that right? It mushrooms. And, then again, there are places where they use cross-bars. Most places in Colorado in this northern field when they extract the coal, they room

and pillar it: they drive the room up and pillar it back. They use just a flat bar, a flat green bar of any kind about 12 or 14 feet and they just put two straight legs under it. Where it heaves, where the bottom comes up, they have to sharpen it or replace them props under the bar every time they break, but they usually sharpen them and, in fact, it does a pretty good job. They last a little longer.

And then there's roof bolting. probably you've never heard of it. Well, where the roof was so fragile that you can't put enough timber to hold it and, now in my experience.....I was the first man that ever roof bolted here in Colorado. We had props and cross bars and everything to hold this roof up, but it wouldn't hold so we go to roof bolts about 8 feet high and we put a plate under it. Over the top of the plate, between the plate and the roof we put a half a cross bar or a 4x8 timber. And it holds the roof up. See. You can't recover these no more because they are split and they are 'way up on the inside, see. And that's the roof. Now I have taken places where we didn't have roof bolts and had bars and the roof had sagged about 10 or 12 inches. We put roof bolts in and pulled that right back up in place.

Now, you take in a slope mine like the Lincoln where they have belt lines (I put the first belt line in) and this belt line is to go to the bottom of a 400 foot...the shaft was 400 ft. but the syncline was about 1840 feet. One belt we put in there was 42inches wide and it was 5/8 inches thick. It was so long that they put in a transfer point in the center of the syncline. Then as you go in we have cross belts from one section to another. Now one section, what I mean by that is where one group of men were and probably a quarter mile away there's another group of men working....that's another section. We had cross sections that dumped on the main belt. It's contolled automatically. When you want to stop it, you push a button on top or at the bottom and it stops the whole system. Where one cross belt comes in, if it doesn't dump right, the belt

stops automatically if it's working right. Now at the Lincoln they have, oh, I suppose, five miles of belts. When I was up there we had about two miles.

Then there's places, you know, that we used to load right out of the car. The muleskinner used to pull the car right up to the face and load it.

And now probably you wonder who they dug out this coal loose.. They used to have cutting machines. Now they have a short-wall cutting machine and a long-wall cutting machine. The short-wall cutting machine is one that two men can handle in no time, see. Now I don't remember nothing about the air machines that they had years ago because I didn't work then in the mines where they had them. But they did have them in the field. And then they had the old Roid machine and they had the machine that was made by Goodman that used to cut across about 10 feet in and then they used to shear it about 22 feet high. They would shear it right in the middle and they'd blast it on both sides then when they used to use a lot of lump coal. See.

Now, as I started out with sumps, the mines in this field don't have too much water. They have more clay and the clay is hazardous and bad for the machines they have now. See. Because the shuttle cars have tires....they don't use cars anymore, you know, they use shuttle cars and shuttle cars carry all the way from six to ten tons. Where this adobe or slug is under the coal, if they have just a little moisture, they can't work very good. So they either have to take it up or they have to lengthen the belt line, see.

A man's got to go in to see this stuff, you know. Now when I started in the coal mine, I was a rope rider. That's where we used a rope to pull the cars in to a certain place and it was on the level, there was a drift, and then it sloped as we went in. We had two ropes: a tail rope and a head rope. Now the tail rope went all the way down to the mine and we worked three veins at the same time. One place was just 50 feet different from any other and the sumps there went straight down to the coal. That was about 37°. And then as you went up,

you know, the cars we hauled the coal out with, we hooked the ten rope back on when they got outside, the man who dumped the coal took the head rope off and through it to the side and the ten rope held the cars until he blocked them and then he had to dump that coal by hand. All these cars had swinging doors them days. See. He pulled a latch, the doors opened as he hit the horns. You know, the horns was about.....would hold the four wheels and as soon as they hit the horns, the coal would go down and it would top over. And then, oh, a little later on, about the 1930's, they came out with a bigger car but they done away with the horns. What they.....self dumpers, see, because they used self dumpers in the tipples or the derricks.

Well, you want to know about the Columbine strike. As you know, after 1912, the United Mine Workers lost ground in this state and then out of a blue sky the IWW came in, which it really behooved all of us. The IWW means the International Workers of the World. They originated in the state of Washington and British Columbia. They came here out of the blue sky in 1927 and they went on strike. The co-op leaders here wouldn't sign up with them so they kept on striking. And then to make it worse, a new picketing way was to have solidarity and have everybody march in along the mine property. So this went on for about two weeks, when the Rocky Mountain Fuel Company in coordination with the state, they sent out thugs.....in my opinion they were thugs, because they had no real name as state police.....they called them state police after they got in trouble, but they were not state police. I can remember the morning at the Columbine Mine when a friend of mine, Jimmy James here in town, brought me home and we were detained....my folks lived there....so it was about 3:00 in the morning when we got home and I noticed there was a machine gun on the tipple and a machine gun on the water tank so they finally let me in the house and Jimmy James was escorted out of town. Jimmy James lives right here in Lafayette....he could verify this....and I seen what was going on. At that time the Columbine Mine

was fenced all around its perimeter and they had guards of, oh, I'd say, intervals of every couple of hundred feet and when these people came from Erie early in the morning in their cars, I warned them, because I thought there was something going on. But Adam Bell who was the leader of the Union here at that time, he said we couldn't shoot because we had a flag, but they found out flags didn't hold them. Right in front of my Dad's place, I'd just sat on the bed when a bullet came through one window and out the other at the corner of the house. I looked outside and you'd think somebody was plowing the ground up where the machine guns was hitting, just right outside the fence there about 10 feet from the house. These miners, they all rushed to my dad's place, my mother wasn't feeling very well, but anyway there was quite a few wounded and she took the sheets off the bed and them that she had to wrap up the wounds and we had lysol and what not. The police, what they called themselves, the thugs, they came up to the house and they interfered with my dad and my dad was going to let one have it with a 30.06 rifle when I stopped him. I said, "Dad, don't do that because we are in trouble enough." "Well," he said, "no S.B. is going to come here to my house and chase these people out because they are working people." So. At that time I know I just missed a bullet, because right where I was sitting a bullet came through. I was thankful, but anyhow when we looked out there was some dead and some wounded and we had to take them into the house. But anyhow, I was arrested that day along with some other fellows from Lafayette here and taken to Greeley. Why, I don't know, because I just came in that morning and I wasn't working. But anyhow that was the Columbine Mine. I remember some of the fellows there but I didn't know them personally. The only person I knew that got killed there was Mr. ~~Esty~~ Gastanes and he lived about three doors from us. His family lived here in Lafayette but he was living there. Anyway, at that time, the state police.... we had a fellow by the name of Porkchop worked for the state police, he was a thug; in fact, he was a guard down at the Canon City Penitentiary, he was leading the

group and they was all drunk. That's when the Rocky Mountain Fuel Company, my boy, let all their officials out and Mrs. Roach took over. And from then on Mrs. Roach said she would recognize any organization that was affiliated with the American Federation of Labor. And that's what started the United Mine Workers of America on its feet again here. In fact, we....at the Columbine Mine at that time....we gave half of our pay to put the Rocky Mountain Fuel on its feet. But there was never done nothing with the thugs....never nothing done with the thugs.

Yeah, two days later I came home. Yes, they questioned me, but I never knew nothing, because we'd been down in Denver having a good time...yes, me and Jimmy James and a fellow by the name of Herb Ward, but Herb didn't come to the mine but Jimmy James brought me home.

Anyway, I could not go back to work at the Colubmine, they hired all new personnel there and Mr. McLeary wouldn't give me a job so I had to go to another mine which was organized about a year later as the State Mine. I wasn't along. There was a lot of people who never got back on until Mrs. Roach ordered a complete review of the personnel and she hired the most of us back. See. But they did change all of the personnel. The people who ran the Rocky Mountain at that time was Mr. George T. Peart who was an old associate of the Rockefellor Plan, let's put it that way. The Rockefellørs, they had the big interest in the coal mines here and they bucked the Union and they was the ones who caused the big deal down at Ludlow, at Green Canyon, at those mines down there. So when Mrs. Roach came in, the good old soul, her, we all started organizing and they boycotted Mrs. Roach, in fact, let's put it that way, when she joined the Union. And the Union people went as far as Fort Collins and they went as far east as the Kansas line to sell her coal. We took it on ourselves and the men who took that upon themselves was John Magnasum (the poor soul is dead now) and Jack Maxwell.

And that's the extent of it, my boy. Did that help you?

Well, the Company store, until Mrs. Roach got it, you worked, you traded at the Company store. Before you got your pay, they checked off. When I first started working at the mine I never got no United States money, I got scrip. To cash it for money I lost 25%. My folks done it, everybody else done it at this time. Well, I started with the Rocky Mountain Fuel in 1916...I was 13 years old. And before I got my pay, I got 15¢ an hour, they took out for something I didn't get like oil for my lamp or carbide. See. And the store took their share out first until Mrs. Roach came and she said people didn't have to trade at her store unless they felt like they had to, see. But when we helped Mrs. Roach, she authorized the storekeepers to give up credit until the Rocky Mountain got on their feet. She said if we was going to leave or if we needed the money we could have it, but she was in pretty bad financial shape until she got on her feet. And then she finally didn't get on her feet, let's put it that way, and she asked the Courts in Denver to let somebody to run the mines for her...or to let somebody handle the financial crisis, and they hired a fellow by the name of Newton. And Newton did. Before any of their creditors got paid, all the men got paid first. And we was not forced to deal with the Rocky Mountain store. That was supposed to be a different organization, but nevertheless it was the Rocky Mountain Fuel. The CF&I was the same thing, only their stores had a different name. I worked for them, you know, me and my dad, because that's all we done... repaired shafts and we repaired tunnels. That's where I learned the trade.

(End of tape 1012)

One correction: the interview took place on February 10 rather than March 10.