

# STEEL: *The Diary of a Furnace Worker*

*The Original 1922 Edition by Charles Rumford Walker*

Editor's note:

*In the summer of 1919, a few weeks before the Great Steel Strike, Charles Rumford Walker bought some second-hand clothes and went to work on an open-hearth furnace near Pittsburgh to learn the steel business. He was a graduate of Yale and a few weeks before had resigned a commission as a first lieutenant in the regular army.*

*The following is an excerpt of what he saw, felt and thought as a steelworker during that time.*

*From Chapter V: (page 76) Working The Twenty-Four Hour Shift*

We were about to tap. I went after my flat manganese shovel, but it was gone from the locker. Some dog-gone helper has nailed it. I took out an ordinary flat shovel.

In back of the furnace Nick was already busy with a "picker," prodding away the stopping from the tap. He burned his hands once, swore, gave it up, went halfway along the platform away from the tap, returned, and went at it again. Finally, the steel escaped with its usual roar of flame and its usual splunch as it fell into the ladle.

I stepped back and nearly into Shorty, who had come to help shovel manganese. "Where you get shovel?" he said, with his eyes blazing, pointing to mine.



*Furnace workers crossed all ethnic and racial boundaries. Homestead (PA) Works, Open Hearth Shop #5, ca. 1954, United States Steel Corporation. Photo: Archives of Industrial Society, Wm. J. Gaughan Collection, University of Pittsburgh*

"Out of my locker," I said.

He started toward it, and I held it away from him.

"I tell you that goddam shovel mine—" he began; but Dick, from the other side of the spout, shouted at us how many piles to shovel, and Shorty shut up. We were to get in the first big pile and the next little one.

The ladle was beginning to fill. "Heow!" yelled Dick.

Shorty and I went forward and put in the manganese. It was hot, but I took too much interest in shoveling faster than Shorty to care. Then came the second ladle, during which Shorty's handkerchief caught on fire and made him sputter a lot, and rid himself of some profanity in Anglo-Italian.

I went to that trough by Eight afterward to wash off the soot and

**“If it's not done quickly, you'll get a burn; you're an arm's length from molten steel, and no door between.”**

cinder and put my head under water, straight down. I knew back-wall was coming, and sat down a minute, wondering, rather vaguely, how I was going to feel at six or seven the next morning.

Back-wall came. I had bad luck with it, trying too hard. It was too

hot for one thing. There are times when a back-wall will be so cool and you can hesitate for a long second as you fling your shovel, and make sure of your aim; at others, your face scorches when you first swing back, and you let the stuff



*Homestead (PA) Works, Open Hearth Shop #5, Mar. 1949, United States Steel Corporation. Photo: Archives of Industrial Society, Wm. J. Gaughan Collection, University of Pittsburgh*

off any fashion to get out of the heat. There's a third-helper on Five, I'm glad to say, who is worse than I. They put him out of the line this time; he was just throwing into the bottom of the furnace.

Everyone develops an individual technique. Jimmy's is bending his knees and getting his shovel so low that it looks like scooping off the floor. Fred's is graceful, with a

Front-wall can be very easy, — you can nearly enjoy it, like any of the jobs, — if the furnace is cool and there's a breeze blowing down the open spaces of the mill. And too, if the spoon hands right in the hook, and the first-helper turns it a little for you, then you can stand off, six feet from the flame, and toss your gravel straight into the spoon's scoop. You hardly go to the water fountain to cool your head when the stunt's over. On number one the hook hung wrong, the spoon wouldn't turn in it and you had to hug close, and pour, not toss. I tried a toss on my second shovel and half of it skated on the floor.

"Get it on the spoon, goddam you!" from Nick.

So I did.

After that, we sat around for twenty minutes. Fred looked at the furnace once or twice and changed the gas. Sever gathered in front of Seven — Jock, Dick, the melter, Fred and Nick.

"Do you know what my next job's going to be?" said Fred.

The others looked up.

"In a bank."

"Nine to five," said Dick. "Huh! Gentlemen's hours."

*This excerpt was reprinted with permission from The Association for Iron & Steel Technology. The book "STEEL: The Diary of a Furnace Worker" is available for purchase through the AIST.*