photograph of six pan grinders in a row he laid down on the floor and cried like a child. Poor old Bob—how he must have suffered!

As previously mentioned, an effort was to be made to operate the French calciner. This effort was made. Then another effort was made. A violent effort was finally made. Finally is the word used because the calciner got violent, too. It kicked in the baffle walls in the retort chambers, and kept continually blowing the retort tube covers off. It was most unnerving to wander about on top of that pile of brick and have those covers pop up a couple of feet at you, and be surrounded by wisps of flame. The spectators sitting in safety on the coke pile over near the trestle were interested, of course, and made bets on how long before it would blow up, and you with it. Yes, the coke pile was the place for the experts. The gas control valves were in the rear of the calciner, and the inspection ports in the front several flights up. The operator would turn on a valve, and then run around in front and climb a ladder to the peephole, usually arriving there in time to get his eyelashes singed by the puff of gas. There was also a flight conveyor to handle the hot coke from the extractor tubes. The red hot coke would make the conveyor gallery expand and curl up like a dried leaf. After repeated trials, the old calciner was abandoned, building 51 erected, and the Isbell-Porter retorts were installed.

The new location of the calciner necessitated the removal of the Submarine to the outside of the building, which made everybody happy. The old Submarine has had a checkered career, too. It was built in Denver at a high altitude, and had to be acclimated to our floor elevation (556.5). Back in the Mountings it was supposed to operate with a fivehorsepower motor, but down here in the low country it developed a torpid liver. and got sluggish or something, because the Electrical Department tried it with a 5, 10, 15, 25, 50 in succession, and finally hooked it up with a seventy-five horsepower motor before they got any action worth mentioning. At one time the Submarine was taken out and thrown away as being no account, but was replaced to provide work for the electricians during the hard winter of 1917-18.

The new calciner rejoiced in a waste heat boiler, whose tummy was warmed by the waste gases from the calciner. When the calcining plant was started up, the boiler was not connected to anything in particular, and spent its days popping off at 125 pounds, and not doing anyone any good. It acquired the name of the Waste Steam Boiler in a short time, and has spent years living down its reputation.

Thus we see the Carbon Plant has been through many trials and vicissitudes. It has seen many changes in personnel, from Superintendent to Sample boy. It is a wonderful example of how the ball may be kept rolling, no



GEORGE STANBACK WAS WORKING IN THE CARBON PLANT WHEN ED. BIDDIX ARRIVED. HOW'S THAT FOR AN OLD TIMER?

matter who quits and gets out; but it is a better example of how fast the old ball can be rolled when the whole gang is going to it. And take it from me there is a live bunch on that Carbon Plant Payroll now.

Take the Baking end. W. R. Young is turning out Number One carbons from old J. D. Black's furnaces—and as noted before those good carbons didn't just happen, they evoluted; and W. R. is one of the best litle evoluters we have with us. He has had his bean working all the

time, and has worked out many kinks in his organization and routine that got by a lot of men before him. J. D. is working on his furnaces every minute, for increased output and low operating cost, and he's getting results.

In the other departments, it is the same story. A. D. Howell is knocking 'ell out of the volatile in the calcining house; because it isn't just a job with A. D., it's something to be studied. And with Ed putting the coke into the bin, or into the storage pile, do you suppose it just happens with Ed? No, Sir; there is something back of that grin and underneath the old felt kelly—it's a wise old crock, take it from me. Bob Lee has had years of the peculiar brand of grief that comes with operating extrusion and mixing departments. There was a regular parade of foremen through those departments before Broadwell picked Bob from a crew of steel workers. Bob went right to work, and took his head and his heart with him, wherein he varied from his predecessors, who overlooked these organs. Yes, Bob is on the job both physically and mentally all of the time-for all that is in him.

And in the control division there are L. G. Daniels and B. S. Liles to think about. These fellows have put a lot of time on the job, both with and without overalls, and their efforts have gone a long, long way towards getting this efficiency, or betterment stuff rather, to take root and blossom in every department, so that the old Output and Density is going sky high while the Tonnage Cost and Resistivity are doing tailspins.

And there is one chap always willing to work just a little bit longer and just a little bit harder than the other fellow. He has an ear for every man's story, be he laborer or department head. He sits in the corner on the Thursday meetings, and puts the touch here and there that makes the load seem lighter, and like Aunt Jemima's pancakes, sends away smiling. There isn't any proposition that's too small or too large for him to handle. He goes on the old Bob Fitzsimmons' principle, that the bigger they are the harder they fall, when it comes to tough jobs of any description. It's old R. E. Parks, I'm referring to; and I have never known him to pass the buck but once-and that was on the writing of this dam history. And there you are, Posterity; take it, or leave it.

Miss Gladys Mason left Monday, for a vacation of several weeks,