

INTERIOR PRESENT PUMP ROOM.

But Ruth Roland or Daredevil Jack Dempsey could never have gotten out of that trap without a guide; and by gum the gas couldn't either. It took short cuts—convenient to the gas, but inconvenient to the operators. At times the air was crowded with castovers, gas seal covers, and an occasional section of brick arch cover. They do say that after this furnace was packed for the first time the covers were raised slightly, the gas and the air adjusted, and Mr. Broadwell lighted and dropped a match in the combustion chamber to start the furnace on its hectic career. Whereupon, like David Harum's soft boiled egg, it went off "seemingly in a minute." Monsieur Biddix says it rained bricks afterward for two hours; but then all who have seen Ed umpire bases know that he sometimes will guess at things.

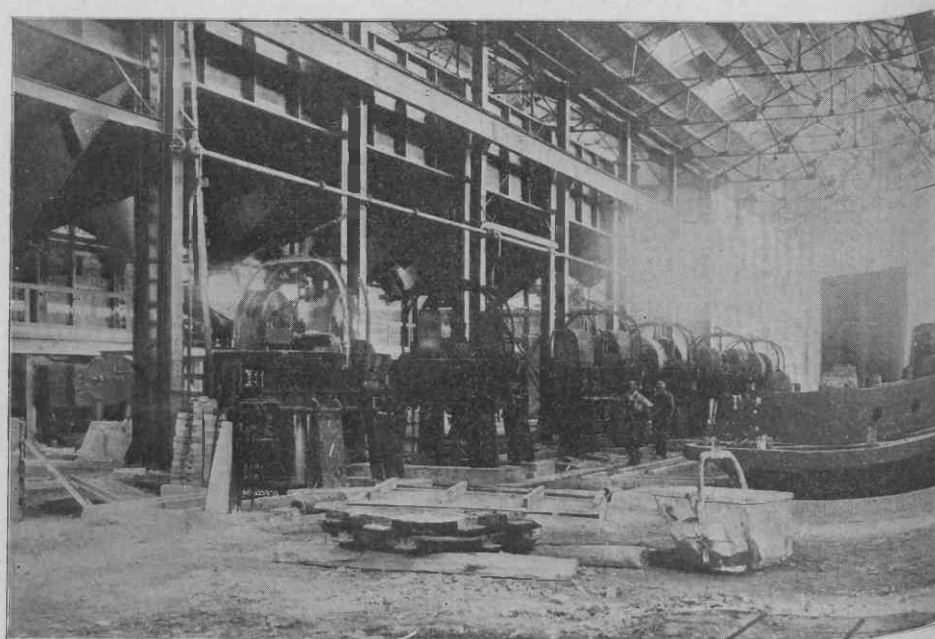
Meanwhile a row of old French pits in bay No. 4 of the Baking Building were rebuilt according to a design from Massena. These pits included a couple of basements also, and a big cast iron gas manifold on the head walls, with a flock of peepholes, ports, and other gadgets. It was very interesting, but ineffective, although tried out for some time. Mr. Broadwell then put in the first section of channel furnaces, from which our present furnace has been developed—or evolved, we should say. The channel furnace was successful from the start, and they were installed throughout the baking department in due time. This

should have ended the worry in the baking department; but shucks, their troubles were just getting a good start.

They had the baking capacity, but they didn't have the gas, and they didn't have the draft. The gas equipment was composed of the four youth's size hand poked producers mentioned above. They might have been alright for dental work, but for baking carbons they were, mildly speaking, inadequate.

Inadequate is also the word for the draft in those days. The French provisions for draft included the one hundred and ten foot stack and two grubby little exhausters tucked away underneath the floor near the stack foundation where nobody could find them. Well, Sir, it was a great sight in the old days to see Si Leybold frothing at the mouth like a mad dog, dashing from the producers for gas to the stack for draft, followed by Jack Burrows, who was the only man we have ever had who could cuss in poetry. He could and done so, frequently. Si's cussing was volumetric rather than poetic.

Eventually the gas producer trouble was settled by installing some ten-foot Chapman producers in place of the little hand poked, man killing soul destroyers inherited from the French. Thus Si and Jack were saved from running around, and enabled to do all their cussing in one place, to wit: at the stack and its accompanying dinky exhausters. They were too small, and moreover were always catching fire, and were hard to extinguish because you couldn't see them. Like when you sit in a little pool of gasoline and then strike a match on your pants. After a few months of this, Four Buffalo "Forties" exhausters were ordered—one for each furnace. They were duly connected to the waste gas flues, and exhausted into short stacks through the roof and side of the plant. They improved the draft situation, but were not the last word on the subject. When the



FRENCH MIXER AND PRESS ROOM.