

THE SIXTH AVENUE SUBWAY CONSTRUCTION: 1937-1941

By Charles Keller

1941 was the time the United States was gearing up for entry into the war against Hitler. The Great Depression was over and money was once more flowing. Big projects like building subways in New York added to the bustle of the energized city. As a young artist I was stirred by the drama of engineering and by the dynamism of physical labor. The Sixth Avenue subway construction inspired me to record this unique building project and portray the men – the “sandhogs” who did the work.

I got clearance to go down into the tunnel from one of the engineering firms, Spencer, White & Prentice. Clearance included signing a waiver, getting a medical check up to rule out respiratory ailments, wearing heavy shoes and being fitted with a hard hat. Finally, I was warned to keep out of the way of workers.

Entrance to the worksite was either by ladder or down a steel ramp to the decompression chamber, a large steel tank with a heavy door at each end. I entered the tank, took my place on the bench with the workers, and the door slammed shut when the pressure was turned on. (This pressure was necessary to keep the East River from leaking in and possibly flooding the tunnel, a sobering thought.) In a short time the pressure was up to 50 pounds per square inch and the door at the other end of the tank, the entrance to the tunnel itself, swung open. Naked bulbs strung along the vaulted ceiling lit the hot and foggy tunnel. The clang of iron sections of the tunnel wall being slammed and bolted into place, the blowing of the air pressure hoses, the signal whistles and the shouting of the men made my head ring. The muddy floor, the muck cars grinding on their tracks, the planks and pipes overhead and my fogged up glasses made my job an exercise in fancy footwork.

The time one was allowed to work in the “high air” was limited. I’ve forgotten the figures, but I think the workers were allowed to work only two half-hour shifts per day. I remember well, however, that we had to decompress for hours in the tank before leaving the tunnel. During the decompression I ate my sandwiches and sketched, while the workers read newspapers and comic books or slept. No beer or carbonated drinks were permitted. The dreaded “bends” (caisson workers’ disease, the forming of nitrogen bubbles in the arteries caused by rapid reduction of air pressure), was to be avoided with the utmost respect. I felt I was floating when I finally got out into the dry, natural air!

The “open cut” technique (surface trench excavations), where the tunnel was not burrowed through rock or deep underground, was also used and had it’s own complications. For one, the elevated trains, still running on tracks thirty feet above Sixth Avenue, were supported by iron pillars that had to be braced with underpinnings. The underpinning installation by the rival Rosoff Corp. dared not interfere with the Spencer, White & Prentice power-shovels, cranes, trucks and occasional blasting.

The construction of the Sixth Avenue subway inspired a portfolio of drawings, a series of lithographs and oil paintings. My involvement with the subject abruptly ended when the United States entered World War II.