

A REMINISCENCE ON BUILDING THE JAMESTOWN BRIDGE

By

Elmer S. Congdon

It was the spring of 1940. To return to college in the fall, I needed \$200. That type of money in those days was hard to come by, but I knew I could do anything I wanted if I set my mind to it. The going rate at that time was 20 to 25 cents per hour, and \$150 for the summer would have been good earnings. Though times were tough in '40 I was able to get work on most any farm – but the pay still wouldn't make up the \$200 I needed.

Work was underway on the Jamestown bridge. I applied for work and was put onto what was called the "Super's Gang." There were six of us in this group – reporting directly to the Superintendent of Construction. In reality we were his "go-fers;" whenever he needed something out of the ordinary accomplished, he would call on one of us. Otherwise, we were kept busy helping out the carpenters, the steelworkers, the masons, the painters, the somebody or else or what ever. The pay was \$.60 per hour – straight. No overtime. The hours were nominally 0600-2100, 7 days per week. The work was back breaking.

Pouring the Roadbed

The Super asked me to show up for work with a pair of heavy construction type work shoes and a burlap grain sack. I discovered what the sack was for on my first job, which was to help the carpenters lay up the roadbed concrete forms.

The concrete forms were made up of 4x10 timbers underslung from the steel work. Plywood was nestled into the 4x10 structures and reinforcing rods were laid inside the plywood. For each pour, the material for the forms was carried forward from previously poured bays

I helped carry those forms. The bays are at this point made up of steel girders all welded together to form the structure. Two of us would raise a 4x10 beam onto our shoulders, protecting the shoulders with the folded grain sacks, and walk forward and up grade to the next open bay and set the beam in place for the carpenters to secure. Two men would

in the same manner walk the plywood panels forward carrying them on top of their heads, again protected with the grain sack. As I remember, these panels were 4x12 and very heavy, as were the timbers.

Bringing up the bundles of reinforcing rods was the neat trick. Each bundle had several rods, and each rod must have been 24 feet long or more. They extended across the total roadbed width. As you walked, the rods would bounce up and down, and if you weren't careful the mass of the rods would knock you off your feet.

Walking along the top of I-beams demands sure footing. Of course, the passageway over which these rods and lumber were carried was never straight – all paths were made up of 90-degree turns following the I-beam pattern of the bridge structure. We soon learned to walk in cadence no matter what we were carrying and to walk smoothly with minimum bounce – especially with the rods.

Needless to say this work was very demanding and very strenuous. Muscles rebelled the first week but soon came around.

The concrete to fill the forms was mixed up on a barge tied to the pier. It was hauled up in a bucket, dumped into two-wheeled buggies that were handled by one guy, maneuvered down hill to the point of pour, upturned, and the concrete dumped out. The weight of one of those buggies had to be something awful because if one ever got away it made a mess of what it ran into! Strong backs were the way of life. Every day that we poured the cement finishers would work through till approximately 2100 or 2200 until the cement "set." I would work with them screening, troweling, setting up lights, and playing the ever present gofer.

Elmer Congdon lives in Wakefield, RI and travels extensively in his motor home. His education, which motivated his summer on the bridge, was interrupted by World War II, but he finally got his degree in 1947.

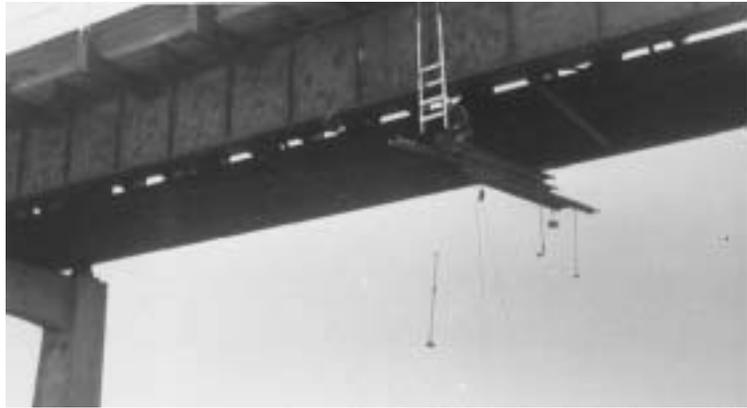
When a section was complete, we would go over the side - literally. We would climb down to staging platforms hung under the bridge, remove the forms, haul them up over the side, and carry them forward again.

After the forms were removed the cement had to be smooth-finished, scraped and cleaned, the steel cleaned of cement and rust and prepared for painting. When other things weren't pressing, I helped the pointers. I would get down under the roadbed on a staging platform and scrape and clean the steel. The stuff we scraped off was residual cement drippings. These chips sometimes were small - the size of a small coin or as large as a misshapen ping-pong ball.

Sitting on the staging platform far above the water - most of my time was up the superstructure area - watching the various pleasure craft plying the channel presented a beautiful sporting challenge. If one were to correctly estimate speed, wind, and trajectory, he could make a bull's eye bombing run on the boat and occupants. It was great sport but even more so when you spotted a gorgeous nude laid out on her back sunbathing on the upper deck of a private yacht surrounded by canvas side rails. Her supposedly private interlude would be rudely interrupted with a surprise from the sky!

Preparing the Cement

I remember one day being told to report to the cement barge to mix cement. One of the guys was off sick. I went over the side, down to the pier top, and then down a wooden ladder strung to the side of the pier. On the barge was one giant French Canadian from West Warwick, about 7 feet and built like a bull, manhandling bags of cement. The job entailed carrying bags of cement from the storage bin to the mixer hopper and dumping them in. I asked him what to do. My mistake. He said just watch me and do as I do. He picked up one bag and grabbed it in his teeth; he swung two more up under his arms in his armpits and grabbed two in his hands. He walked off with five bags of cement to the hopper. Each bag must have weighted about 80 pounds. Now you see what I meant about an overgrown giant. I think he was the "Masked



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Marvel" that used to work the local fair and carnival circuits.

I didn't take five bags a trip. I limited my efforts to two bags - one under each arm. But doing that all day long was something in itself.

Jackhammering

Another day the Super told me to help one of the "gang" get a couple compressors into working shape. The compressors were needed to run the jackhammers. At every "pour" samples of the mix were taken in special test canisters and sent to the structure lab at Rhode Island State College (now the University of Rhode Island) to make sure the concrete met specifications. In this case the test labs at the college were used to test for compressibility strength. One of the recent pours had failed tests and had to be removed and repoured.

To remove a section of the roadbed was no easy chore and didn't sit well with the Super. Since I came from the college and was taking Engineering, he thought doing the removal would be excellent "hands on" training. For days on end, I jacked that concrete out of those bays. I carted it out and cleaned it out. I learned what a jackhammer was the first hour, how to use it the second hour, and how not to use it the next. Hanging onto a jackhammer and running it into an immovable steel beam sends the force of the hammer back through the handle into your arms. It will jar your teeth and pop your eye balls - believe me.

After the first hour I didn't think I would ever use my arms again. After the first day I didn't think I would ever get out of bed again. After the first week

I don't think any parts of my body were connected with any other. But then I started to become immune to the punishment. I was learning how to use the jackhammer and not kill myself. I learned how not to fight the steel rods, how not to try "jacking" steel girders, how not to let the hammer do the work and not me. Once I mastered the thing I was set to pull the bridge down. But we only had three bad pours that I recall – thank goodness. It was costly to mess up the concrete mix. Very strict attention was paid to the exact measurement of sand, gravel, cement, and water.

Riveting the Girders

One day the Super sent me to help out the steelworkers. Simple directions: take these rivets up to the forge – a half a barrel at a time. At the time, the steelworkers were building the superstructure that soars up over the main channel. The forge was on a platform high up. There the ironmonger heated up the rivets and threw them to the riveters above him on the top of the superstructure.

The way up was via the steel arches extending up either side of the bridge. These arches are built-up boxes of steel that effectively create a ladder with slanted rungs. That may be stretching it a bit, but it is possible to climb up this superstructure. And climb I did with a half barrel of rivets on my shoulder. Not once but over and over all day long.

Looking at the steelwork today, I begin to wonder.

Crossing the Bridge

One Friday afternoon the "golden spike" was driven securing the beam connecting the structure built up from the east shore with that coming across from the west shore. The beam, a long 3-foot deep I-beam with wide 12-inch flanges, was secured solidly,

whistles blew, and all the steelworkers took off for a long drink. Some of us came in Saturday, but not the steelworkers.

Sunday I came onto the job as usual and found no one around. I went up to the top of the hill to the foreman's house and knocked on his door. He was glad to see me – despite his hangover. Sunday had been declared a holiday, but apparently the Super had failed to notify all his "gang."

The foreman, however, had gotten word that the watchman on the Jamestown side of the bridge was sick and would not make it in. So, seeing as how I was there, would I mind going over and keeping watch? I said sure and took off, looking forward to a day of leisure in comparison to my normal workday.

But how to get to Jamestown? The foreman assumed I'd driven to work on my cycle or a car or something, because how else would I have gotten there? He thought I'd ride back and take the Saundertown ferry. But my mother wouldn't let me drive my motorcycle to work; instead she drove me back and forth. So, I had no wheels.

I went to find my friend Jake Dykstra. Jake had a neat job. He was a fisherman and owned a boat. He hung around all day under the bridge where the steelworkers worked, ready to recover any guy who dropped into the water. (Some of the rationale escapes me, but the union required it.)

When I went looking for Jake to carry me across the Bay, he wasn't at work either. I was alone.

It finally occurred to me that the bridge was completed – at least there was a tie from one side to the other and I ought to be able to walk across. So I went on up to the place where they had tied the long 3-foot deep I-beam in place and had my first look at



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it. It was what I thought it was but it was unique with respect to the other I-beams I had been climbing over. It was out there all by itself with nothing around it – absolutely nothing! And it was way, way up over the water.

It was a little before 0600, a cool breezy summer morning. The sun was low in the east; the ripples in the water below showed a good breeze. Not a boat in sight. I felt (and was) all alone.

Without dwelling on the situation much (or I probably wouldn't have done what I did), I removed my pants belt, slung my dinner bucket over my shoulder with it, sat down on the beam with my feet on the lower flange on each side. Standing and moving my butt forward a couple feet, sitting and moving my feet and hands forward, I began crabbing my way across the beam.

About half way across I foolishly stopped for a rest, looked around, realized where I was and what I was doing, and froze. Was I ever alone! No body and no thing around me, and way below, the moving earth.

It almost did me in. I felt cold – with shivers. I got hold of myself and concentrated on the beam before me. Nothing else mattered – nothing else could matter!! I continued across what at that point seemed like a 1000-foot beam – though I'm sure it couldn't have been more than 24 or 30 feet.

I reached the end of the beam but not the end of the ordeal. The steel structure reaching out from the Jamestown shore was nothing but just that – a steel structure. The necessary steel beams to connect the piers were there but none of the secondary steel work that forms the outline of the bridge – walkway, rails, roadbed, inner bays. As I reached the eastern half of the bridge superstructure, I still had nothing but I-beams to traverse on.

So I continued with my crab crawl down the structure for a long time. What a difference it made having all this steel about you! Purely psychological, of course, because you could touch only one beam at a time. But mentally what an improvement! After a while I was crabbing along steel suspended over dry land. The end was near.

I don't recall – if I ever noted – the time it took me to cross the bridge but it really wasn't all that long. The distance is approximately a quarter of a mile, maybe 4 or 5 hundred yards.

I spent a most enjoyable day of leisure, doing nothing but hanging around in the sun, chatting with curious sightseers, and drawing full pay. The afternoon came and went. No watchman relief appeared. With no phone around, I couldn't call the foreman or anybody else. The sun was setting and I was convinced I would just stay on the Island. No way was I going back on that bridge!

It was almost dark when mother came tooting up to the guard shack. She had gone to pick me up as usual at the west end of the bridge. After waiting for a spell and seeing no one, she went up the hill to Babbies (now Heffies). She was directed to the foreman's cabin.

When he saw her, the foreman was shocked. He had forgotten till then that he had sent me to Jamestown! He didn't know how or if I had gotten there. Mother took off in a fit, caught the ferry at Saunderstown, and drove up to the bridge. Of course, you can imagine her relief when she saw me. And I was relieved, too – I had a way home! I told her we ought to call the foreman and advise him that there was no night watchman, but she was so mad she said let him stew for while like she had.

The End of the Job

I stayed on this job into September electing not to return to college at this time. I had been spending every waking moment working on the bridge since I started in June. Seven days a week with days anywhere from 10 to 16 hours. My pay was handed to me each week in a brown envelope. I would get home at night, tuck the envelope into my desk, and drop off to sleep. Most envelopes were never even opened. After a while mother started collecting them and putting the money into my bank account. I certainly had no time to spend any of it. The objective had been to earn \$200 to return to school in the fall. I don't recall the figure right now, but I earned somewhere between \$600 and \$700 that summer – actually around 15 weeks.

