



## The Story of the Anniversary Gates

*The following article was written by James A. Wallace, Director of the National Ornamental Metal Museum, for "The Anvil's Ring," a quarterly publication of the Artist-Blacksmith's Association of North America. It describes and comments upon the massive project that incorporated the creative work of nearly 200 metalsmiths from around the world to produce the Museum's magnificent Anniversary Gates. The article first appeared in the Summer of 1989 and has been reprinted and reproduced with permission many times since then.*

Three years ago the Board of Trustees of the Museum expressed the opinion that the main entryway could stand improvement. This was a polite way of saying the place looked like hell, and what paint remained should either be removed to achieve a "well-weathered look," or that more should be applied to conserve the wood. "And fix the damn gates."

The existing gates were built in the early 1930's by the government. Originally the site the Museum occupies had been a part of a United States Marine hospital. The architecture typifies the 1930's Federal Style, with brick and masonry construction, slate roof, and copper gutters - well proportioned and solid. The gates could best be described as gates (comma), iron (comma), ornamental (period). Solid material was welded together with forged scrolls tacked in place. Vertical elements were topped with spear points. Unfortunately, the hinges were inadequate and broke on a regular basis. Years after they were installed an addition of asphalt was applied to the driveway and the gates were raised to accommodate it. Clearly, the subcontractor for the asphalt should have left the ironwork to someone else. For an institution dedicated to extolling the world of decorative metalwork, the front gates made a deplorable first impression.

Ten years of fighting the old gates was enough. The trustees approved the concept of replacing them during the Museum's tenth anniversary year. While producing suitable new gates was well within the capabilities of the staff and smithy, and indeed there was an offer to do so gratis, we all felt the gates and the occasion warranted a different approach. Every metalsmith in the world has a potential vested interest in the Metal Museum and an opportunity to become involved with new entry gates was a way in which many individuals could make a lasting contribution and a personal statement about the art form we represent.

### **Richard Quinnell, Ltd., Of Surrey, England Agrees To Do Design Work**

Given the conservative nature of the site and architecture, the safest solution seemed to be a pair of gates designed in an identifiable and time-honored tradition. We were also wary of "building a camel," a problem inherent in projects where design and fabrication teams number in the hundreds. We approached Richard Quinnell to undertake the design work.

Richard Quinnell, Ltd., Richard's firm in Surrey, England, has a well-earned and world-wide reputation for decorative ironwork. Examples of his work can be found on every continent and command top dollar (or top pound, as the case may be). Most recently, Richard was honored by Her Majesty the Queen, who made him a Member of the Order of the British Empire, an earned achievement, rather than a conferred title. Richard's unflinching design sense and uncompromising commitment to craftsmanship made him our first and only choice as a designer.

In July of 1988, after some coercion, Richard agreed to design the gates. Following numerous frustrating encounters with trans-Atlantic mail systems, followed by frenzied and expensive telephone calls trying to verbally describe the site, structure and design, the Museum entered the age of FAX machines. At first the reality of this 20th Century wonder reduced grown men to the level of kids passing notes in the school cafeteria. Later, drawings and complete details were "faxed," then discussed, and finally agreed upon. The Museum office was soon garlanded with transmissions securely bound together with potato chip bag clips and sorted by subject: frame, cresting, details, lettering, and so on.

Quinnell settled on a design which was based on an early Renaissance gate, relying on the repetition of a classic "S" scroll set in a heavy framework. Thinking that every blacksmith was capable of producing such a scroll, and that each of the 192 needed could be easily shipped, the design offered the standard component the project required. Taking the historic precedent a step further, Quinnell determined that each scroll would terminate in two rosettes (the Gothic tradition that Yellin did so well), and that each rosette would be different. This offered participating smiths a way to make a personal statement, restricted only by special guidelines.

Meanwhile, here in the New World, we were addressing the never ending problem of funding. Projections indicated we would need close to \$15,000, quite a lot of money to the Museum, and not included in the budget year which had been in effect since July. Underwriting was a necessity. A presentation folder was assembled and appointments were made with potential corporate sponsors.

It soon became apparent that no single entity would be willing to fully sponsor the gates. We re-oriented our approach and set about developing a consortium of individuals and businesses. When the network of contributors was established, we had secured just over \$10,000 in support - certainly not the entire package, but enough to proceed.

### **The Call Goes Out To Metalsmiths Around The World**

Notices about the gates were sent to the Anvil's Ring, the Fabricator, and all of the [ABANA](#) chapters through their newsletter editors. Information also appeared in British Blacksmith, Sweden's Konstvide, and several other journals overseas. By late fall we had assembled a packet of information which was ready to send to all who had responded to initial project announcements. The bundle included the engineering drawings for the scroll, rosette details, a sketch of the gate, and instructions from both Quinnell and Wallace. Also included for all U.S. participants were prepaid Federal Express shipping labels, courtesy of Fred Smith (the Memphis-based company's CEO).

Sixty-five cents worth of paper proved to be too much information. Blacksmith's don't read that much and the over-abundance of the written word confused the issues. "I can't get 7/16" stock," came the phone calls. "Did you read the instructions?" "No." Then came the question which actually made sense: "8mm by what for the studs"? So we laid in a supply of studs and spent another 85 cents mailing them to the non-metric world.

By mid-winter, all information packets were out. Staff member Japh Howard's hours had been increased from part-time to full-time, and he had assumed the responsibility of shop supervisor for the project. Stock for the main frames was ordered, cut and delivered to Norman's Machine Shop in Memphis, Norman Price owns a very independent small shop, and his generosity qualifies him for a proper seat at any banquet. Quinnell's insistence upon zero-tolerance and absolutely precise machine work was adhered to rigidly.

In an effort to involve the Memphis architectural community we contacted Bill Nixon, president of the local chapter of the American Institute of Architects, and ironically from Guilford, just a short distance from Quinnell's shop in Surrey. He, along with other city architects, studied historic books on iron from the Museum Library and developed a poster for the gates based on Quinnell's sketches and the traditional architectural drafting approach for detailing ironwork. With the assistance of a computer to generate the repetition of the scroll, and the able hand of Kui-Mew Wong, a limited edition poster was produced for distribution to participating smiths, contributors and the local architectural community.

Amid the stacks of FAX transmissions and scrambled lists, Japh consulted the calendar and best-guessed progress with an eye on the first week of May for assembly. We came up short - big time short. Japh contacted Bob Larison, a past working acquaintance in Sante Fe, NM and persuaded him to take a brief, all-expense-paid vacation to come help out. Bob arrived in March and repaired, almost immediately, to the smithy for a fun-filled week of forging crestings, interspersed with an occasional break on the riverbluff to inspect barge traffic on the Mississippi. Bob and Japh also amused themselves by making 400 feet of collaring stock - forging two grooves in the 3/4" x 1/4" material.

Easter Sunday, March 26, was the deadline for the BABA group to have scrolls and rosettes at Quinnell's shop. Shortly after that, and during the period U.S. parts were trickling in, we made an estimate of how many scrolls we could in all reality expect, assuming of course that we would be inundated with last minute arrivals. It was a sad day in Japh's life when he was told to be prepared to make 60 scrolls and 120 rosettes . . . not exactly the picture of the happy lad he once was.

Cataloguing and registration of the incoming scrolls were initially handled by Japh, with assistance from staff member Nancy Mitchell. When Eleanor Carey was hired in March she quickly received her baptism of fire and had to learn how to decipher "blacksmithese" and recognize hallmarks. Detailed records and tagging assured that our final map would be correct.

### **Assembly Work Gets Underway In Museum's Smithy**

April arrived and travel arrangements were made for Richard and Ron Eastman. Ron, who has been with Richard Quinnell, Ltd., for 38 years, had recently undergone surgery and his active participation was questionable. Japh had made a trip to the Mississippi River Forge Council in Vicksburg to encourage their involvement and to demonstrate making scrolls and rosettes. He had also built a scroll jig. As scrolls and rosettes continued to arrive, the cast iron bearing blocks came in from Lawler Machine and Foundry in Birmingham - all nine of them. The Museum smithy took on

a countdown atmosphere of scattered parts and pieces. Norman finished the machine work, and Burkeen Manufacturing delivered the sheet steel which had been sheered to size.

Across the top of each leaf of the gates Quinnell had specified a Raphael-style lettering which would spell out the name - N-A-T-I-O-N-A-L O-R-N-A-M-E-N-T-A-L M-E-T-A-L M-U-S-E-U-M. Twenty nine letters times two equalled a massive amount of bandsaw work. We called Bernie Hosey in Redmond, Washington, knowing he was using an optically-operated pattern torch. Bernie agreed to cut the letters, and we sent him all the full-size drawings and a Federal Express label. Alas, Bernie's machine was mysteriously struck blind. He returned the letters he had completed, assuming a bandsaw could finish the rest. Japh was not enthusiastic about the project.

I made arrangements to visit Paul Isbell who owns Southern Fabricators. A recent article in the Memphis Business Journal described some highly sophisticated cutting equipment he had installed. We found both state-of-the-art laser cutting tools and another generous and willing contributor. David Hull programmed the computer which operates the machine, and the 3" letters were cut in about eight minutes. The machine had the ability to adjust the size of the lettering from half an inch to ten feet with no change in the program. It also scans the steel plate and arranges itself to minimize scrap.

On May 4, Noel Gregg arrived from Christchurch, New Zealand. Dick Quinnell and Ron Eastman, accompanied by his wife Joan, arrived the following day. Work was scheduled to begin on Monday, May 8, but that didn't happen; very early Saturday morning the forges were stoked. Ron ended his period of recuperation and pulled his hammer from the luggage. "Proper" English scrolls were soon being emitted with Noel and Japh assisting. Amidst the bantering and carrying on about metric-versus-imperial measurements, and who was responsible for each, the short-fall of scrollwork was quickly made up.

Sunday was a continuation of the same. Dick occupied himself logging in scrolls and sketching each of the rosettes. That task kept him busy for two days.

On Monday we were joined by Grady Holley of Vicksburg, Mississippi, and a host of local smiths. Some 1,200 collars were cut and bent, scrolls were completed, and the layout of the main frame was begun. Ron Eastman assumed the role of lead smith. Richard, who by this time had completed his sketching, began laying out and drilling the pierced work on the sheet metal. It soon became apparent why Ron is shop foreman and Richard is relegated to the office and drawing bench. Prior to Richard's arrival, we had three keys to the drill press.

Tuesday morning around 6:30 Noel opened the shop. He was joined shortly thereafter by Ron and Grady. Ron put the finishing touches on the crestings and worked with Grady mounting the shadow bar and collaring all the appropriate intersections. Grady, who had recently completed a screen with over 100 collars for a Vicksburg real estate agent, earned a Master's degree in the subject under Ron. Watching Ron close collars, upsetting or stretching as needed to achieve a clean and even fit, was remarkable.

After the obligatory morning tea, Richard began organizing all the rosettes. Since our instructions regarding size had been largely ignored, their placement was a major consideration. We developed a map, and a specific location was assigned to each rosette. Between the layout and the necessity of removing all the rosettes from the scrolls prior to the assembly, Richard was kept occupied for the better part of Tuesday and Wednesday. Three hundred plastic bagged rosettes with felt tip marker notes were heaped on the counter separating the visitors' gallery from the working area of the smithy.

The media began to arrive on Wednesday. Television and radio coverage was good and visitors came at a respectable pace. Grady, assisted by Brian Russel of Memphis, began setting all the tenons on the main frame. Each of the scrolls was checked for proper contact points and tweaked accordingly. By this time every phase of the assembly had a team of smiths working on it. No smithy is ever too big, and ours seemed to have shrunk. The scroll tweaking team moved its operation to the shop of Charlie McKinney, which is located less than half a mile from the Museum. There they began to weld the scrolls together, first in groups of four, then eight.

### **Brick Columns Are Prepared To Receive The Gates**

Meanwhile the brickmasons had completed the work of removing the old hinges and repairing the columns. It was necessary to carve into each column to allow us to set the new hinges. The main frames, sans scrolls, were moved to the entrance and wedged into position. When Ron and Richard were satisfied that the leaves were perfectly level, with a scant half inch between them, the hinges and bearing blocks were brought into place and cemented. This method proved to be far superior to setting the hinges and then hanging the gates. The frames were left in position overnight to allow the cement to cure.

Very early Thursday Ron knocked loose the blocks and wedges. Nothing moved. No mess, no sag, no more qualms. Tea time on Thursday brought a situation assessment and inventory of progress. It would be a hard push, and we had to recognize the necessity of postponing the final finish until a later date. This decision, while adding to the total cost, was the only option we had if we were to complete the gates in time for the scheduled dedication. In retrospect it was a wise choice as the Memphis weather, which had been blissfully cool, turned wet, precluding any thoughts of sandblasting.

Thursday also brought additional hands: Jerry Grice, David Ponsler and Alex Klahm, all of Florida, arrived on deck. Brian Russell and Japh mortised and fit the lock which Richard had brought with him from England. Alex laid out and riveted on the lettering which had been primed with a zinc-rich, cold, galvanizing paint before being attached. David Ponsler, using an oil can, squirted the same paint in between all the joints and collars on the crestings. All of the runs and residue were removed when the crestings were sandblasted. The rest of the crew welded and collared, welded and collared, and welded and collared some more.

By Saturday morning we were ready to move the first leaf out of the shop and apply the temporary paint. We discovered we were correct in our approximation of weight-heavy. Originally, we had planned to erect the gates in that fine, barn-raising tradition, with everyone grabbing hold and muscling them up. When we realized the gates were beyond merely heavy, we decided to call in professional riggers. As it was Saturday, none were available and most were spending their day off at the International Barbeque Contest which was in progress downtown. We prevailed upon Keeler Iron Works to lend us not only a giant forklift, but an operator as well. Bill Lewis drove to Memphis from his home in Mississippi on his day off and spent the entire day moving gates from the smithy down the drive to the front entry. (He can sit next to Norman Price at the banquet.)

### **The Heavy Gates Are Put In Their Place**

An unforeseen problem was encountered. The Museum grounds are graced by many old and stately trees. They supply not only welcome shade but also spread a good deal lower than the top mast of a forklift. Precariously perched upon what Ahab would have called the "crow's nest," indelicate surgery was performed with a machete and chainsaw. It was discovered that by having six or seven folks swing the bottom of the gate sideways, the mast of the forklift could be lowered enough to squeak beneath the branches we were reluctant to cut.

Ron's engineering and forethought paid off. The gates were dropped into the bottom bearing journals and slid onto the extending hinges. When the hinge yokes were placed over the journals each gate was secured by inserting two 3/8" bolts - a grand erection indeed.

Alex, Jerry, David and Grady spent the better part of Saturday night gold leafing the crestings. When last seen they were sampling a rare concoction of Evan Williams and Hastings 23k. The mixture in their glasses resembled the snow-scene balls typically found in souvenir shops, amber in color with the sparkles of Christmas.

Sunday, May 14. Mother's Day and deadline. The crestings went up, albeit without all the bolts secured. It seems the gold leaf crew forgot which side was front, and in correcting their error, a number of the bolt holes failed to line up. The rosettes were secured in their proper places. As finishing touches were applied, Judy Wallace, who had served as cook, hostess, and dishwasher for the week, in addition to overseeing the daily operation of the Museum, arrived with a basket of fresh blueberry muffins. By 1:00 all the flags were flying, the entry way had been swept, beer was on ice, and everything was in readiness for the dedication.

Father Charles Filiatreau, who had blessed the smithy when it first opened, was in charge of blessing the gates and weather management. Clouds began to build up, and he announced that the ceremony would begin promptly at the appointed time - 2:00 p.m. He said he could not guarantee the weather beyond 2:30.

Shortly after 2:00 p.m. on Mother's Day, 1989 Richard Quinnell dedicated the Museum's Tenth Anniversary Gates to the mothers and spouses of metalworkers worldwide, and to the memory of his late wife, Jinny. Father Filiatreau blessed the gates and "all who enter through them." The honor of first passage was bestowed by Richard upon Judy Wallace.

### **Postscript**

Two weeks later the rosettes and crestings were removed and a commercial sandblasting and painting company was hired to blast, prime and permanently finish the gates. Each of the rosettes was treated individually by the Museum staff as the various metals dictated: paint for the iron and steel; clear finishes for the non-ferrous and delicate iron surfaces. Everything has been replaced and, with the exception of some additional gold leaf work, the gates are complete.

Several scrolls are without rosettes, and there is no hurry to fill them. The remaining spaces will be awarded no more frequently than one a year to metalsmiths invited by Richard and me.

The Tenth Anniversary Gates are, beyond any doubt, magnificent. The camel was successfully avoided, and the degree of individual expression is truly inspiring. The Gates embody everything the Museum represents, not only in how they were made and by whom, but as a permanent monument for and by metalsmiths worldwide.

- *James A. Wallace, Summer 1989*

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