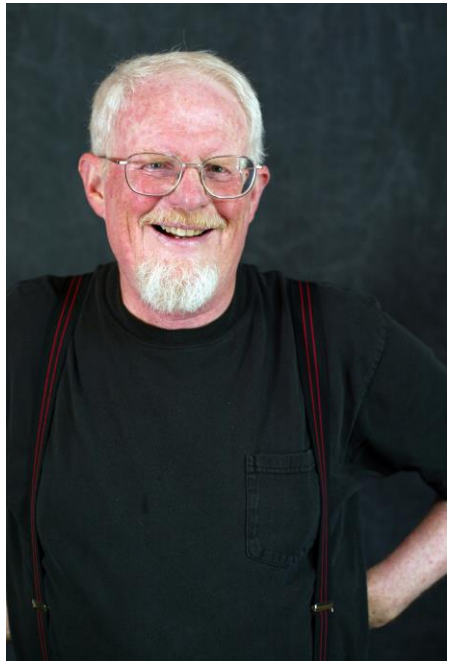
Sculpting while working at Hewlett-Packard

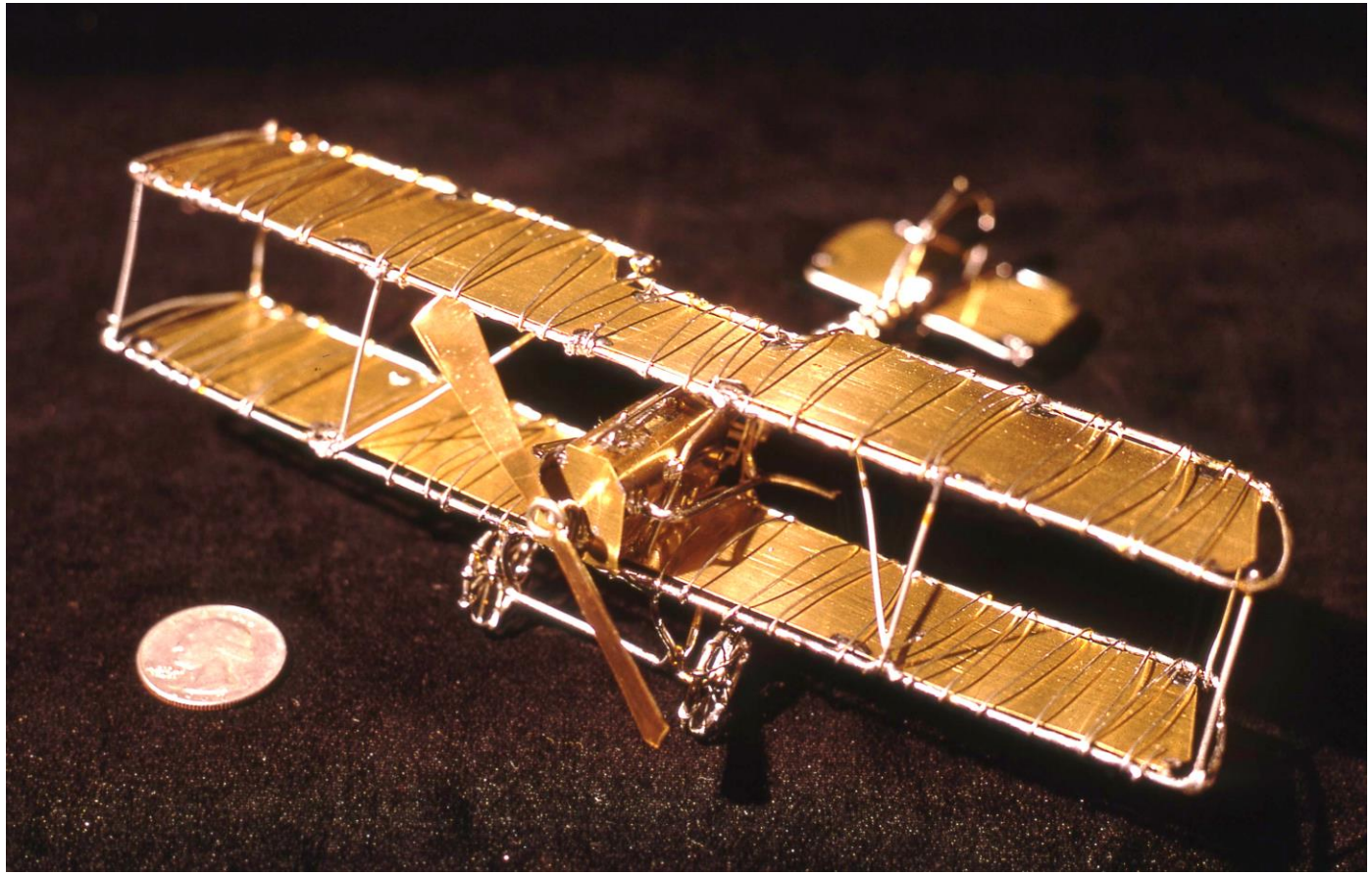


By Jeff Thomas, retired from Keysight in Santa Rosa

Sculpting in metal

While starting my 38-year career at HP/Agilent/Keysight in the mid-sixties my ex-wife and I lived in a small rented house in Menlo Park; an easy commute in my VW Beetle on Page Mill Road to HP headquarters. I'd always had an urge to draw or tinker with clay no matter what my main occupation was, whether it be working at my Dad's metal fabrication business, school or socializing. While working in the lab, I used the lab store's brass shim stock and bus wire to build simple sculptures like the biplane here.

It was a hobby I could do at home on a TV tray since our rented house had no suitable space for more hearty metal-working equipment. So, I bought bus wire in different sizes and rolls of brass shim stock. At the right is the first sculpture.

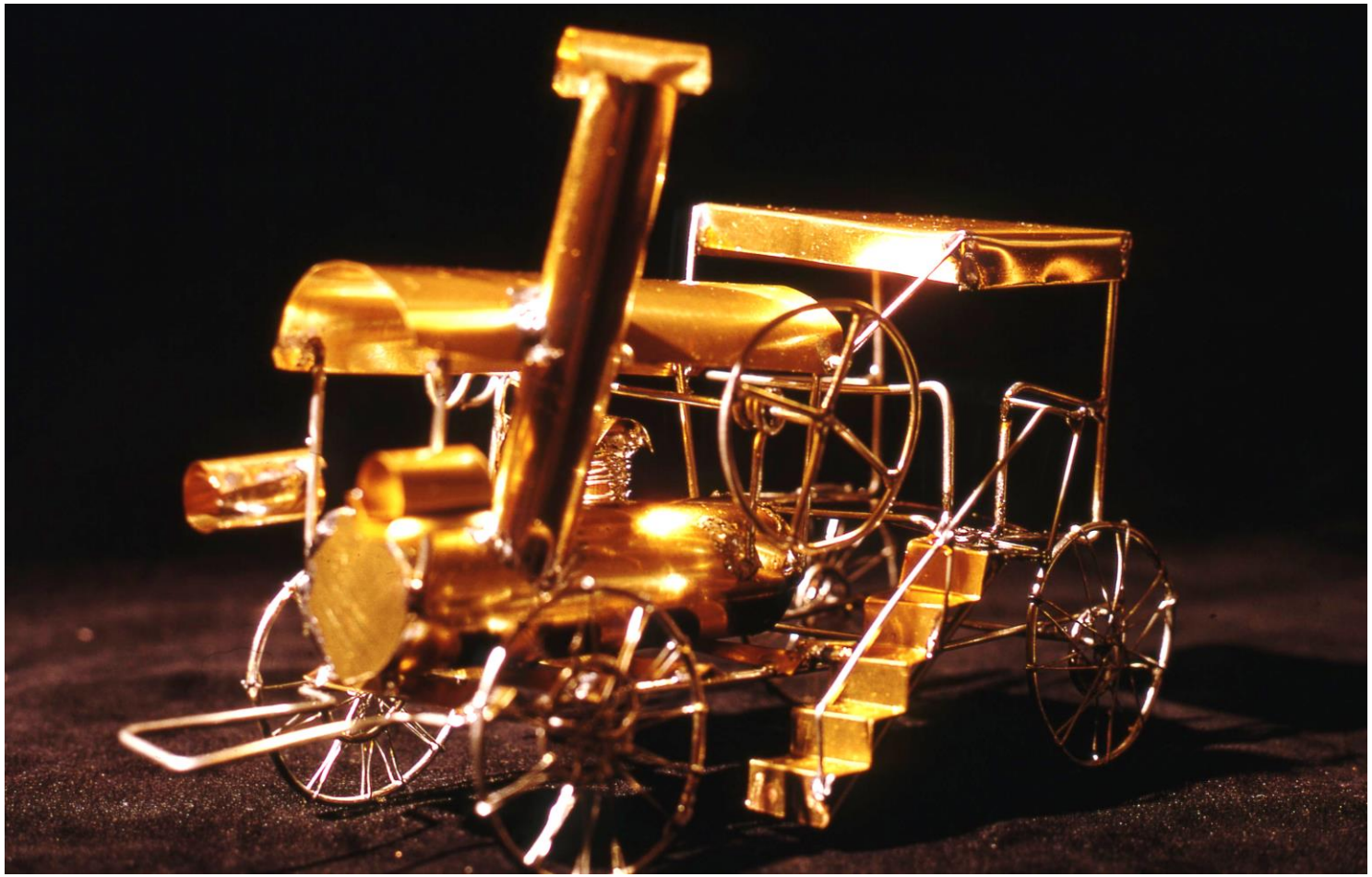


First Tricycle

About the time I was using the brass and wire to build little figures like this tricycle, there was an outdoor art show at the Sheron Heights shopping center on Sand Hill Road in Menlo Park. All I had to do was bring a card table and buy a space to exhibit.

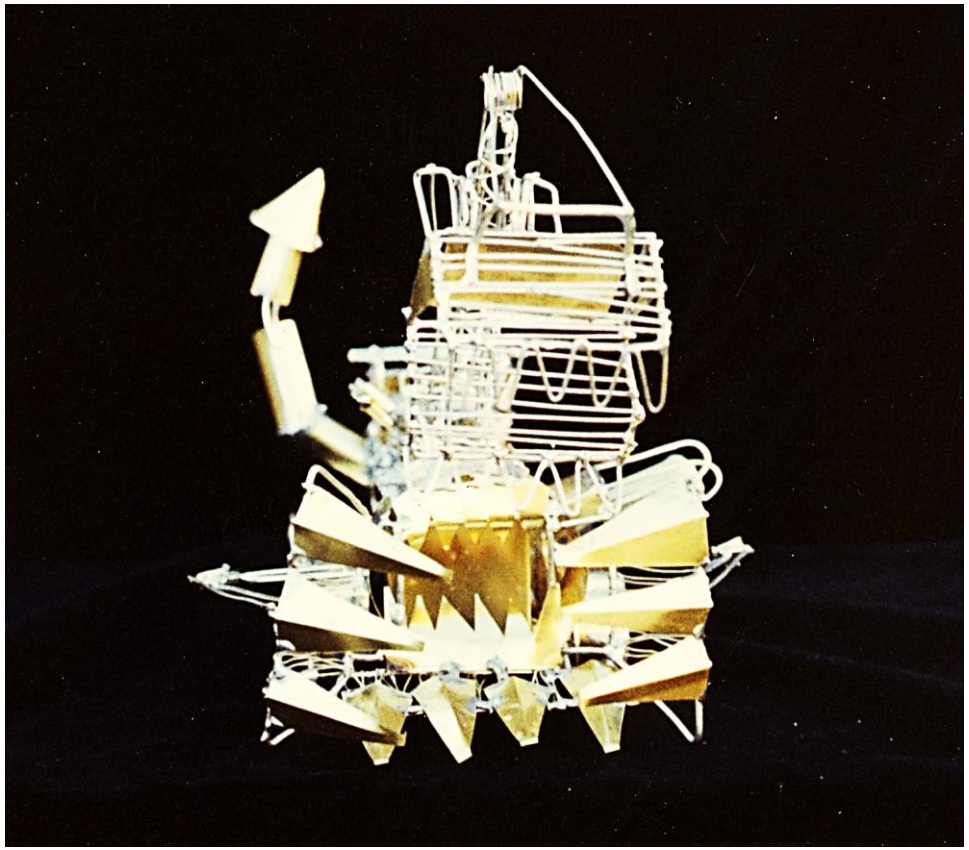
Steam Tractor

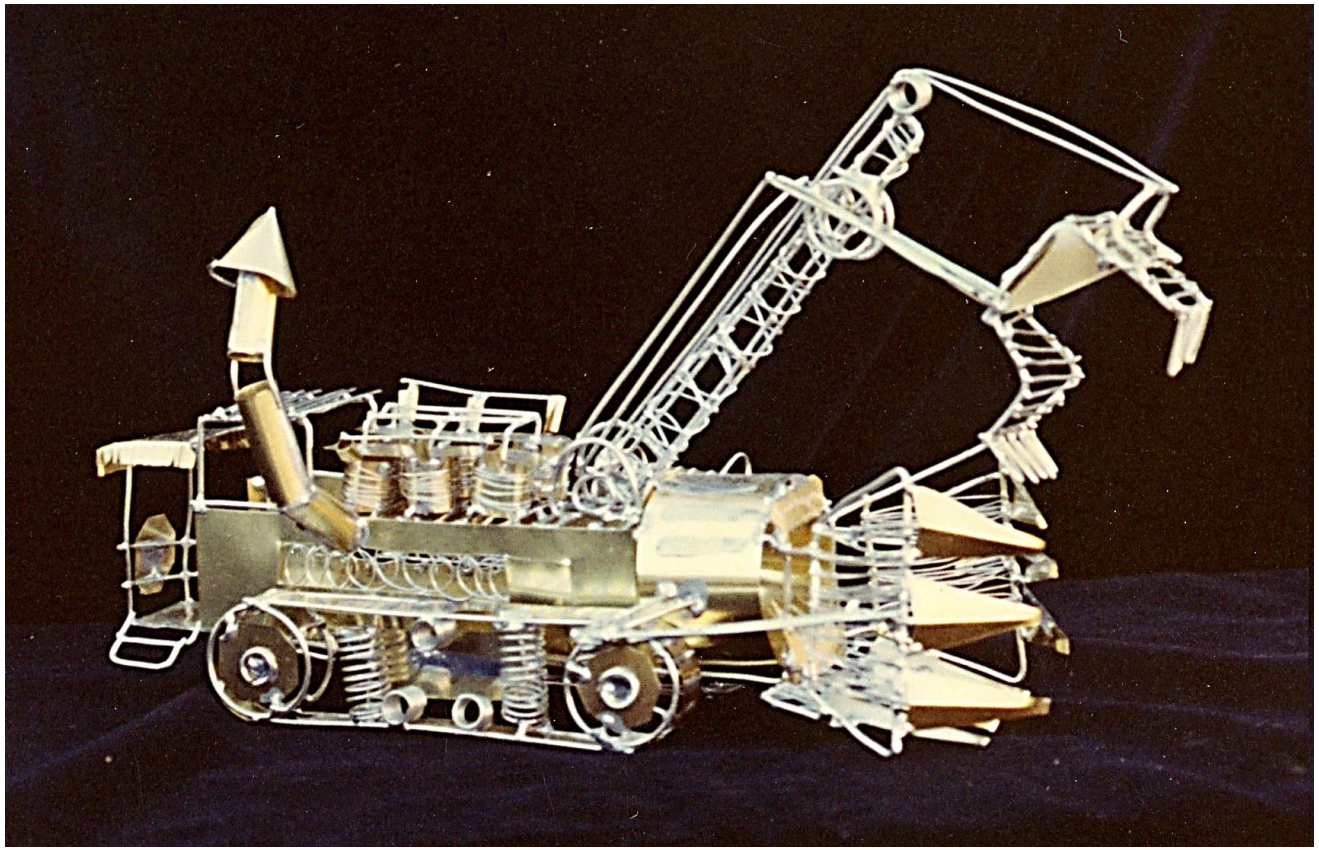
I got carried away with whimsical designs, such as this tractor-like work, which people seem to like. The more bizarre, the better they sold.



Digestive Tractor

Here is a tractor-excavator that was on the desk of our general manager, Paul Ely, as a symbol for an aggressive marketing theme: “If you don’t buy it, we’ll find someone who will.”

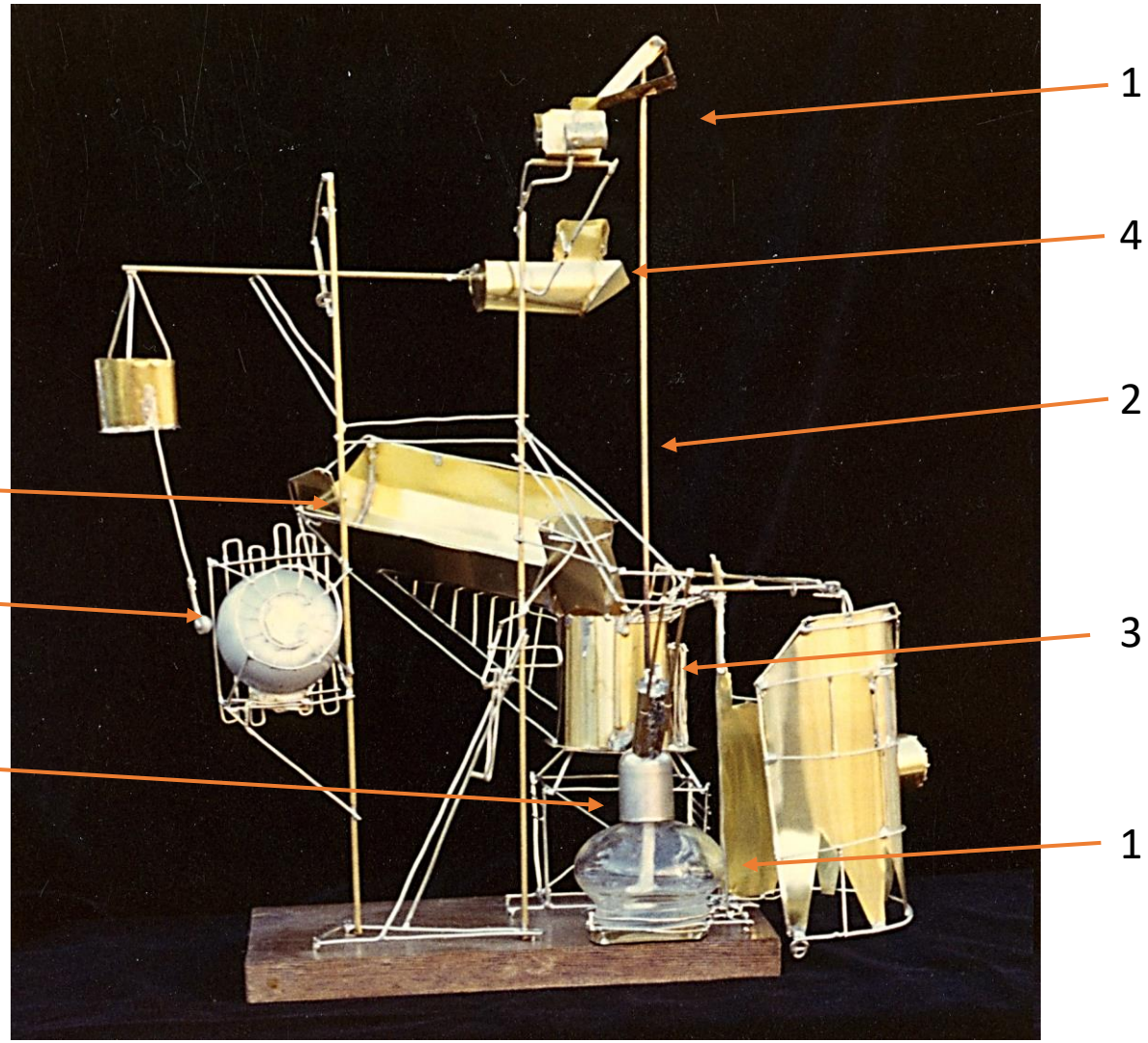




Leaky Water Tower No. 2

I used brass and wire to build kinetic sculptures. Here is Leaky Water Tower No. 2. Here's how it works. The alcohol burner at (1) heats a tube (2) which is fed water in the tank (3). The steam fills the cup at one end of a lever (4) until the water tips, emptying water into the trough (5) back into the tank and ringing the bell (6). When the water tank empties due to evaporation or leaking it triggers a cap (7) to slide over the burner, extinguishing the flame.

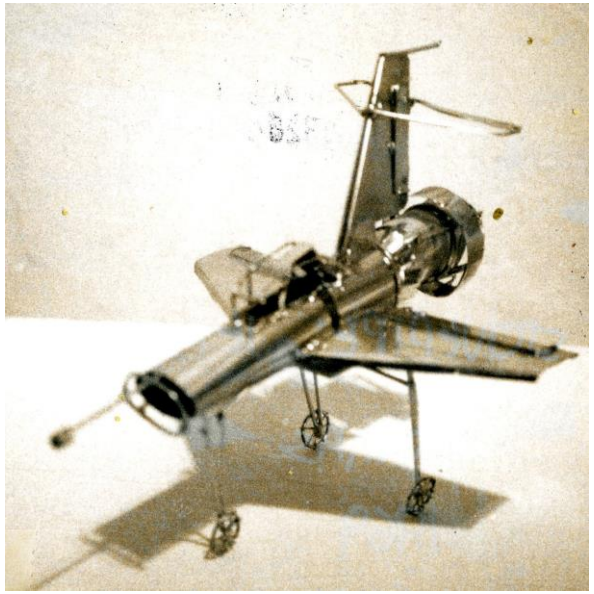
Such kinetic sculptures were temperamental and took constant attention, so were not for sale, but personally satisfying.

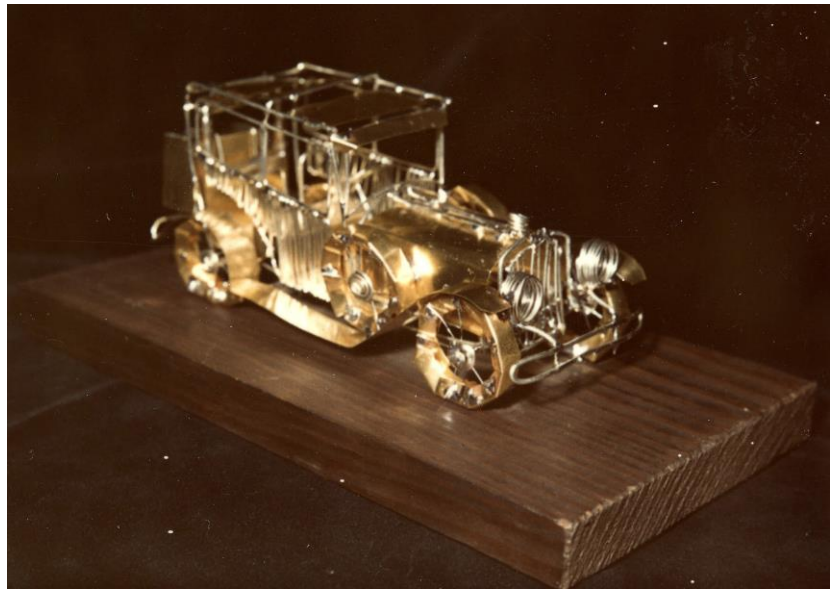


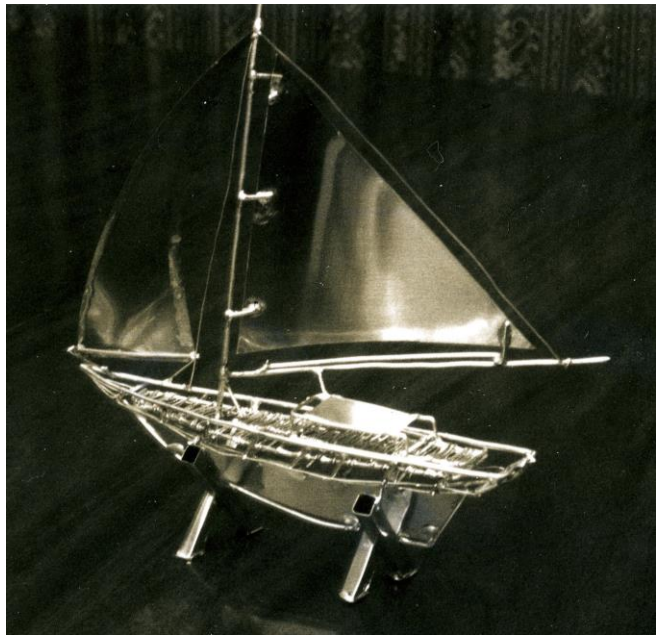
Sketches in Brass and Wire

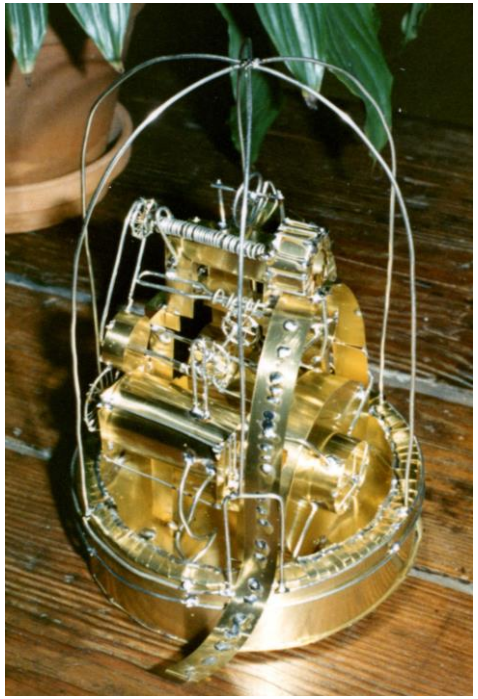
Brass shim and soldered wire was a great medium for building small items like these.

From top right: Stovepipe jet, 1922 Plymouth, sailboat and stock market ticker-tape machine.



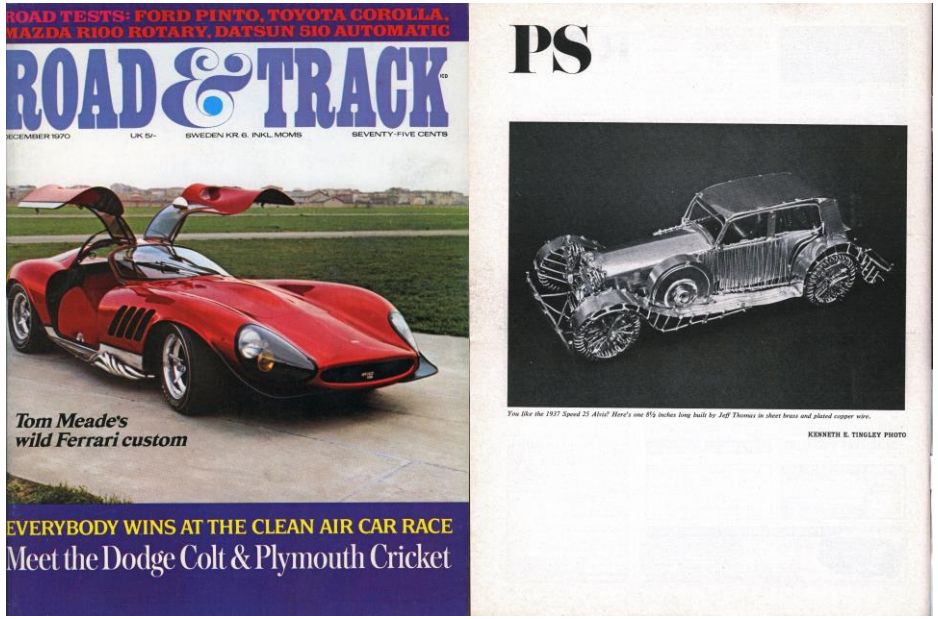


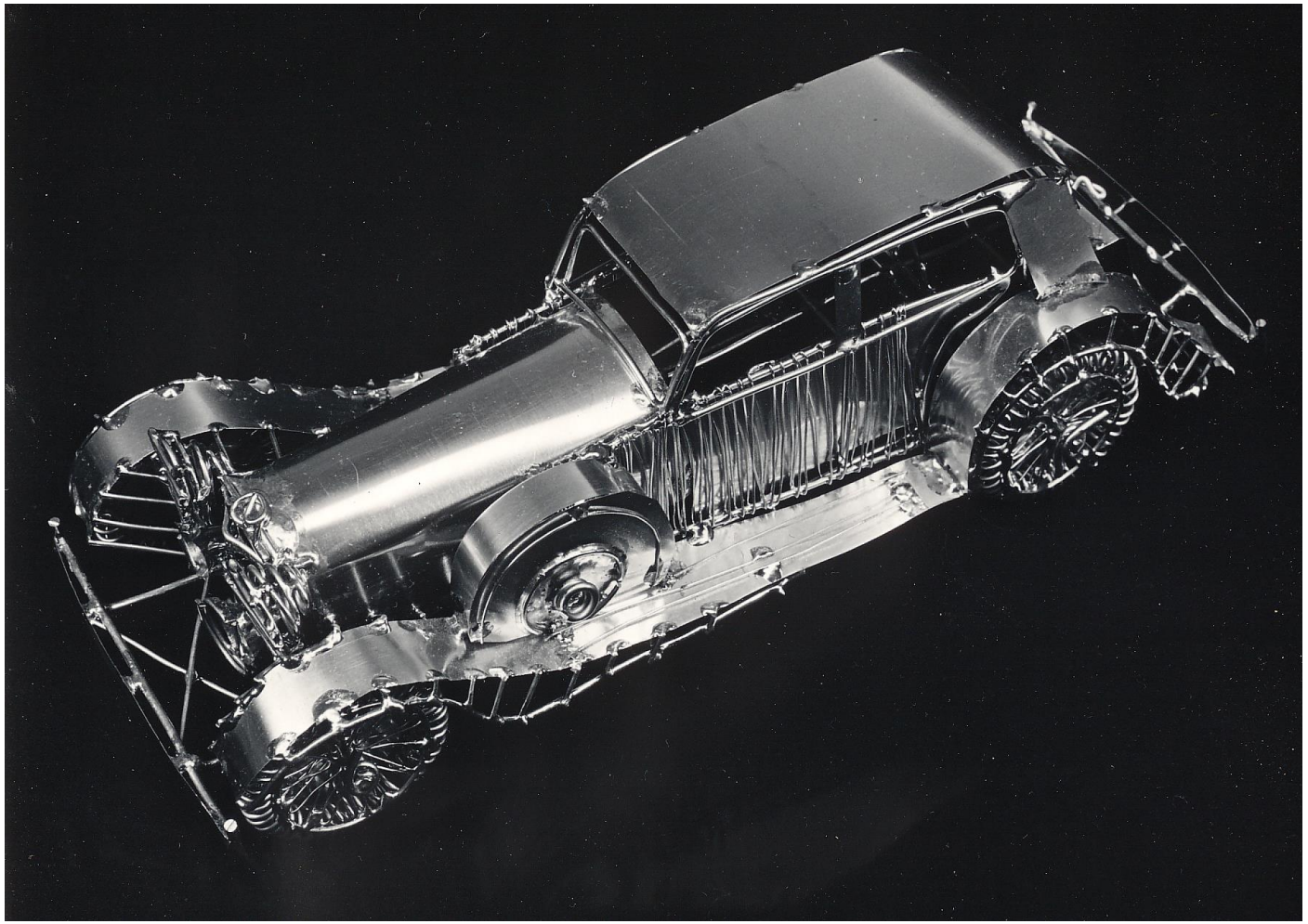




Model Vintage Auto

I was commissioned to create this model of a 1937 Alvis sedan owned by Ken Tingley in the HP sales organization. He submitted the photo to Car & Driver magazine, where it was published in 1970 on their postscript back page.





Gallery House in Palo Alto

In the ‘70s I was fortunate to be juried into a co-op gallery in downtown Palo Alto, just off University Avenue, on Hamilton. There were about 40 artists represented, each taking turns exhibiting and being salespersons. When it was my turn to exhibit, I shared the space with a stone sculptor named Abramowitz, the wife of a Stanford professor. She purchased the sculpture at the left for his office to watch over his shoulder.

The other artist was Jacqueline Kansky, a serigraph designer.

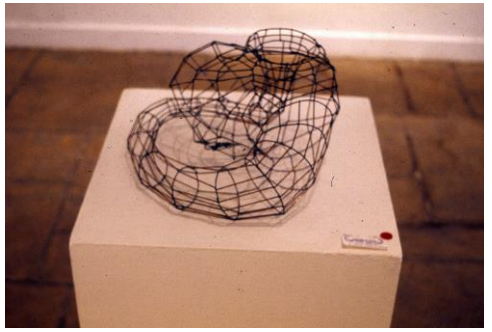

Candle-powered sculpture

Serigraph by Kansky

Beautiful, playful, etc. . . .

Three-artist show must be seen

My son, now 57.



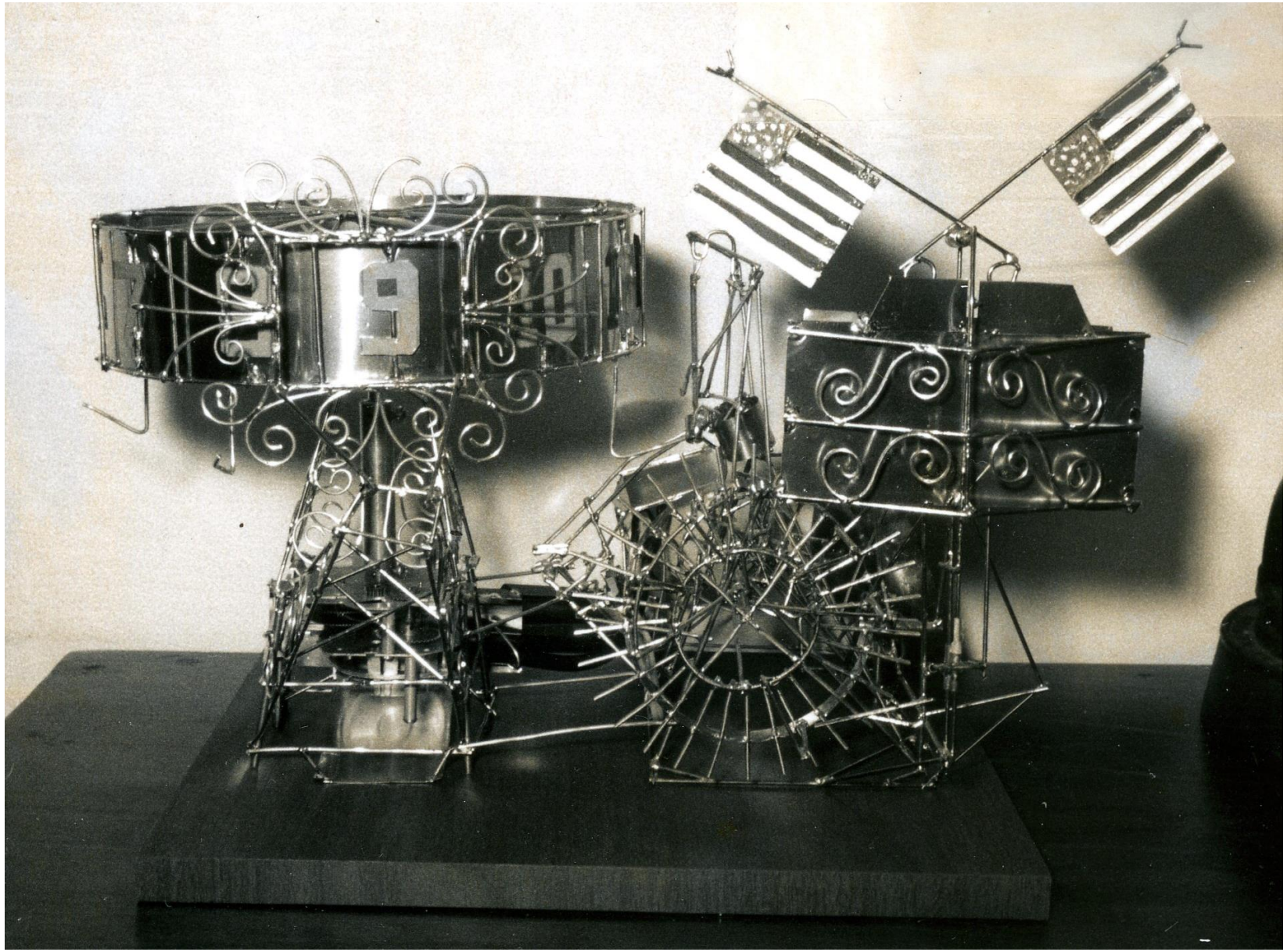
A Klein bottle, only one surface.

DAR Clock

One of the strangest kinetic sculptures is this clock based on a synchronous AC motor. It was dedicated to Daughters of the American Revolution for some obscure reason.

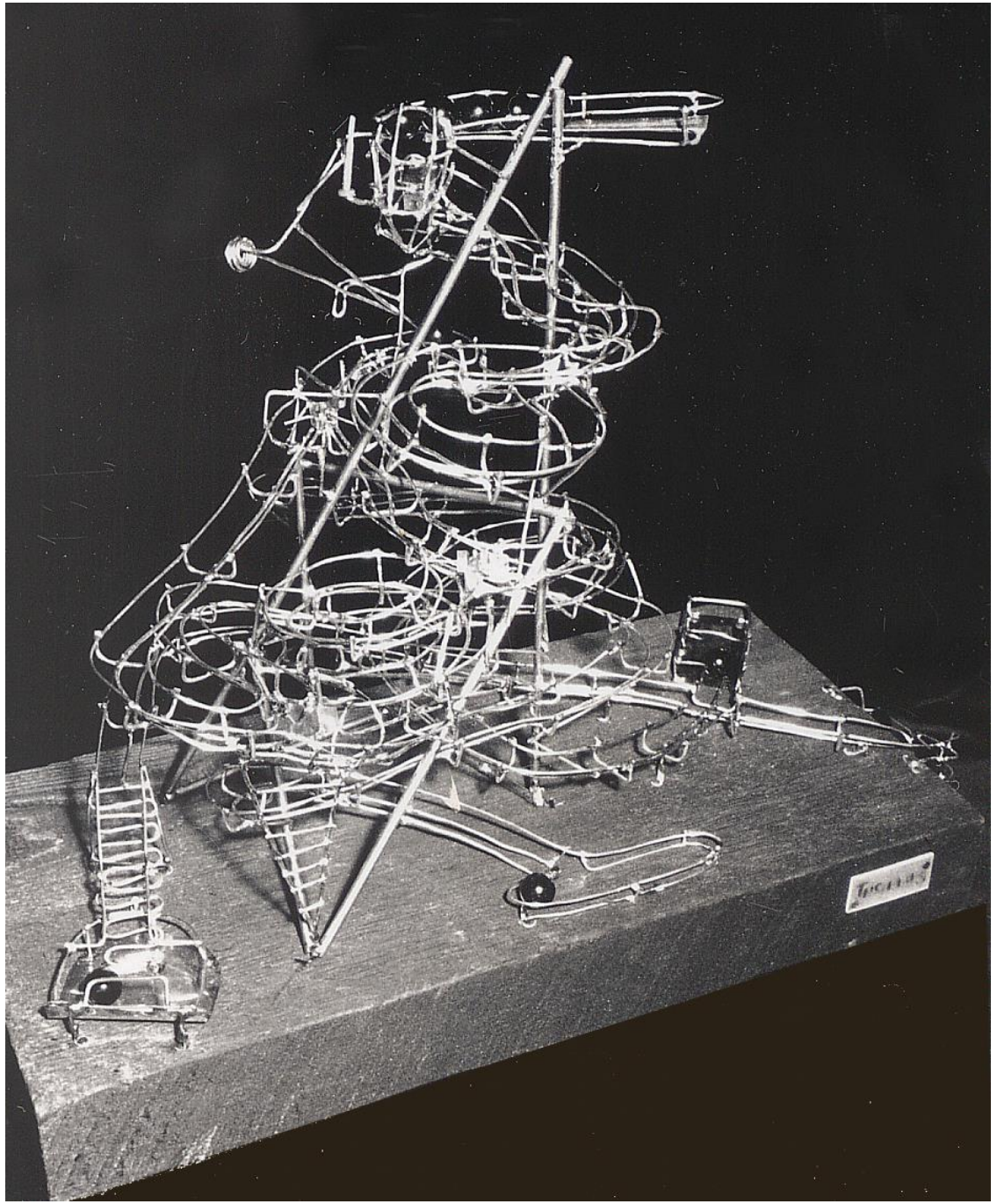
The drum on the left read the hours of the day, while the mechanism on the right kept the flags hidden until the top of the hour. They would pop up and wave for a few seconds then be returned to their hiding place.

Made with wire, brass shim and solder, it was too temperamental to sell or give away.



Ball Return No. 2

Always fascinated by the action of marbles flowing down a ramp, I made this solder and wire contraption which had several binary switches in it to divert the marbles into four different pens at the bottom. Each marble released would trigger the another until they were all dispersed.



The Agate Standard

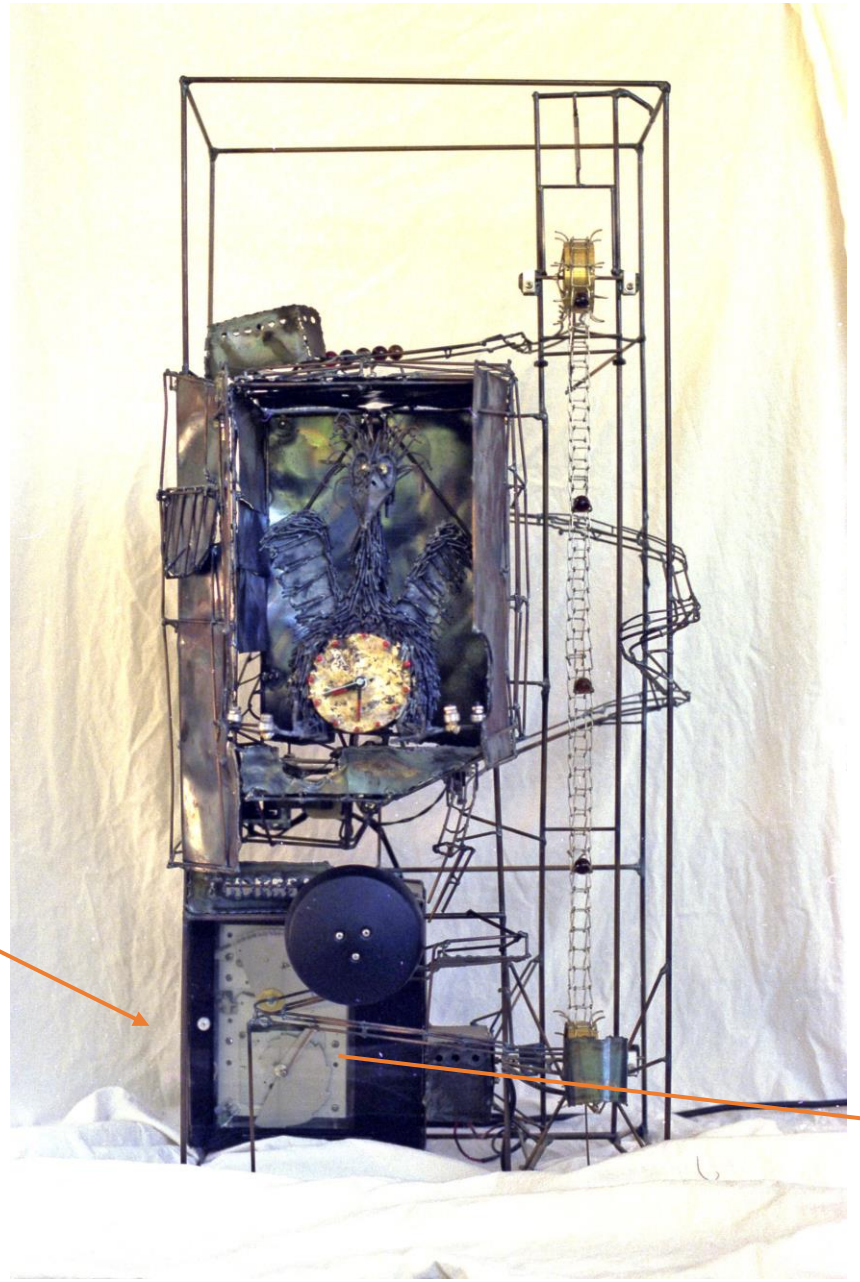
About the time that HP was introducing a state-of-the-art cesium time standard. I made clock using a Sears Company clock which struck the hours with a traditional chime. I adapted it to a sculpture so that the mechanics would launch marbles down a ramp to ring a large bell, then be recycled to the top que. The sculpture was used in jest by Frequency and Time Division manager Alan Bagley at an annual product review by Bill Hewlett and David Packard along with a placard boasting its features and benefits.

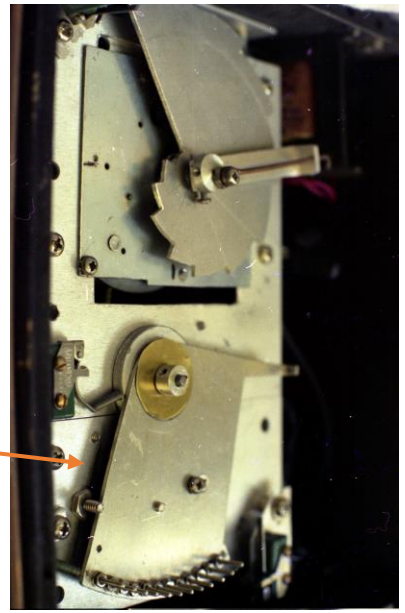
In the Garage

I was itching to make larger sculptures, but the wire and brass materials wouldn't support pieces over about 16 inches. So, I bought an oxy-acetylene outfit and taught myself how to use it without burning down the house. My cousin-in-law, Bob, made this beautiful wood-carved caricature of my welding look.

The Agate Standard Revised

I rebuilt the Agate Standard for my own entertainment years after it was used as a joke exhibit at an HP dog and pony show for the technology for very accurate time base instruments, cesium-beam time standards.
In this re-incarnation, I took out the Sears chiming clock and built my own chiming clock that you see in the lower box. So proud was I that I put a transparent cover on it so the so-called snail-shell cam could be seen. The cam sets the number of marbles released on the hour. And a Big Bird with a clock exits double doors and lays a ping-pong on the floor.

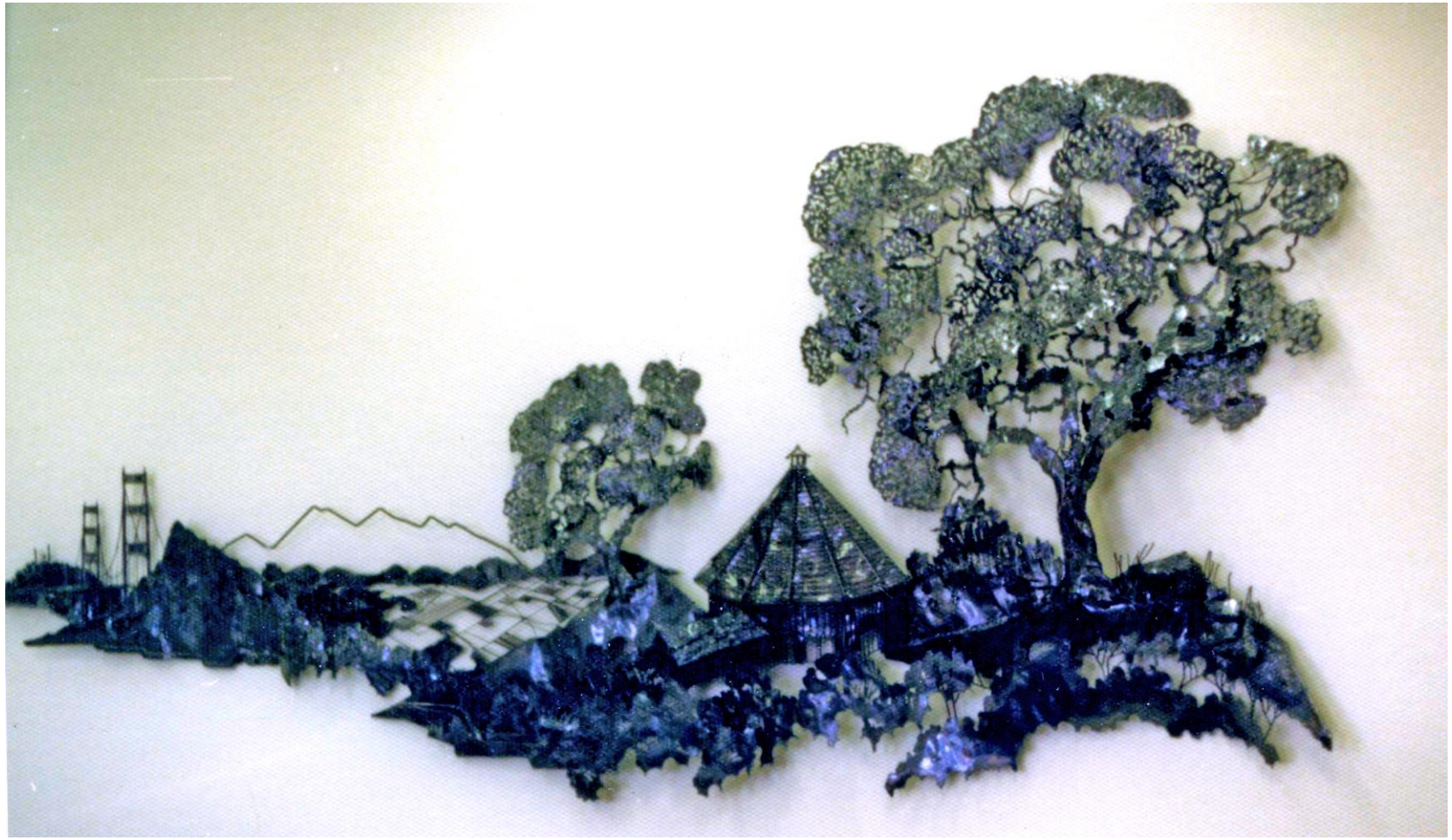




Fountaingrove

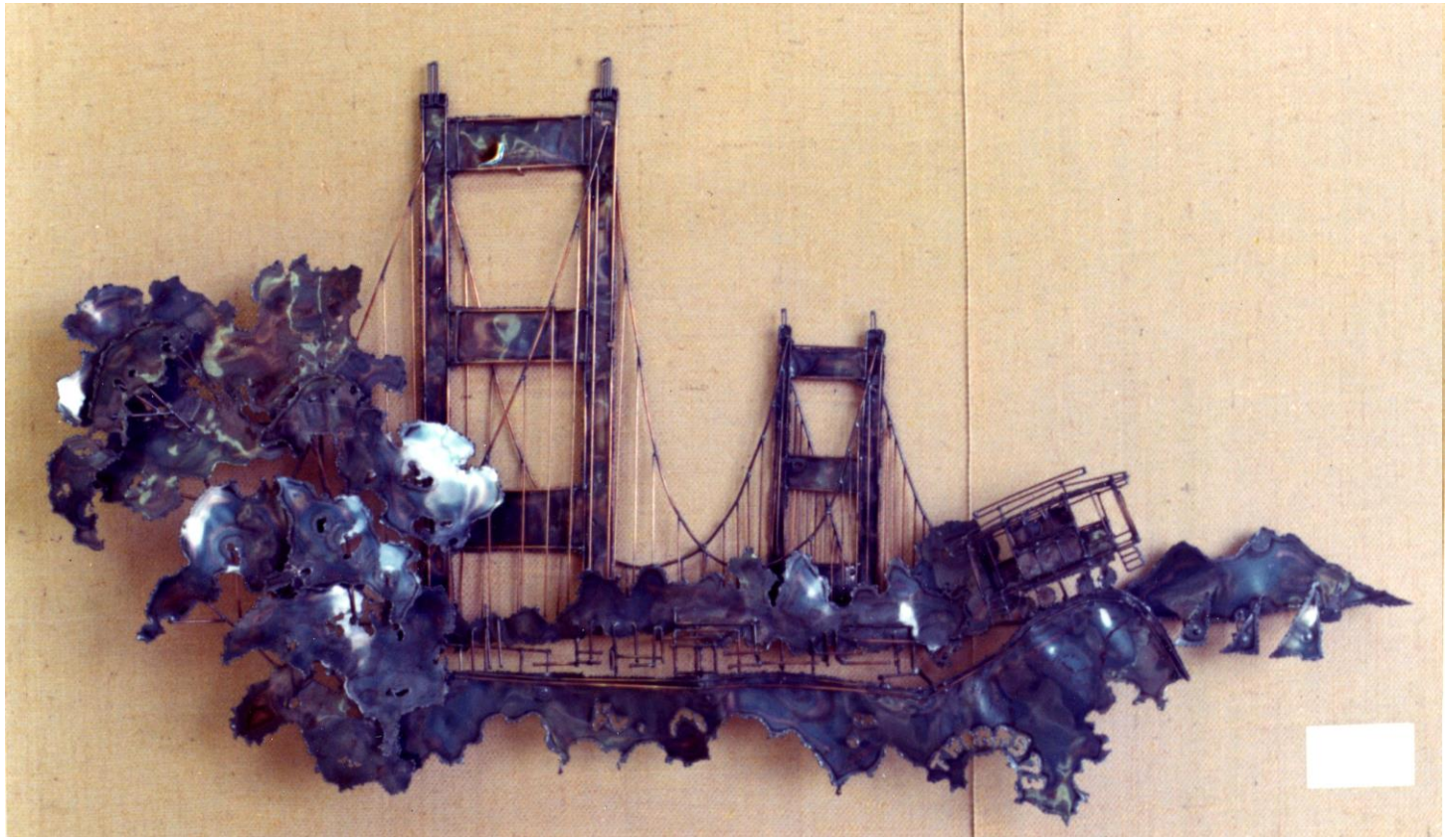
I had always dabbled in pen and ink drawing. I sought commissions that I could create to look like three-dimensional drawings to hang on a wall. This sculpture was for the new Santa Rosa HP Fountaingrove buildings, ready for us in 1976.

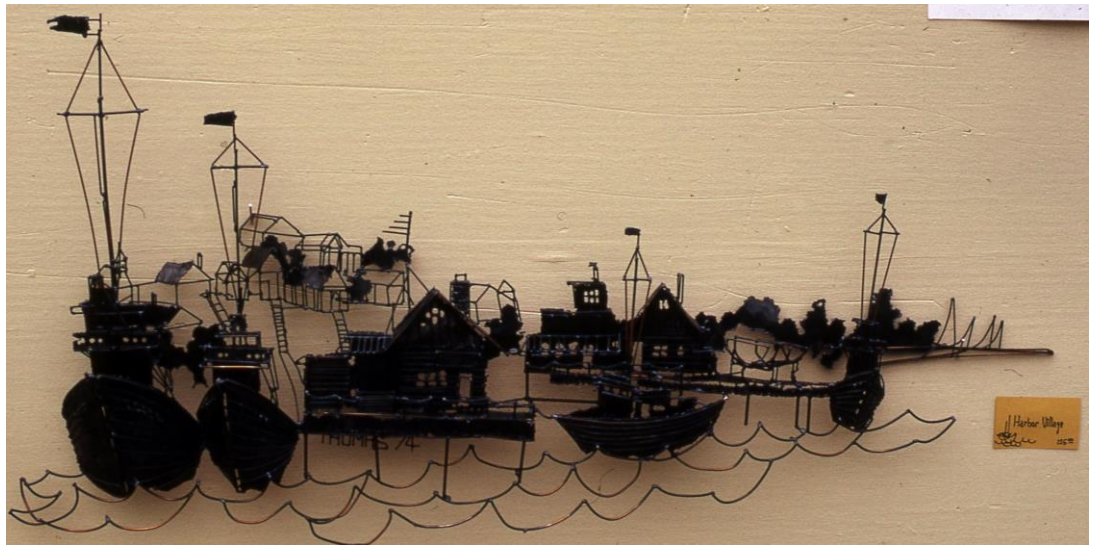
The sculpture was installed in the lobby, then moved about the facility until a recent remodel. Now it's back.



Caricatures for Tourists

Some of the most popular sculpture designs were of the popular tourist sites in San Francisco and the Wharf.



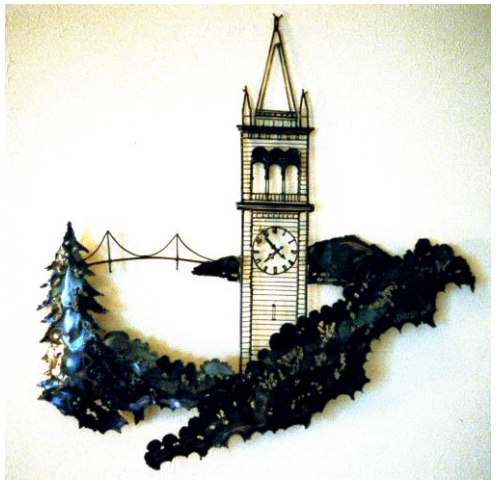


Commission Works

These are some of the custom sculptures I built for people who had a subject and a place they wanted to fill on their wall. I would get their approval with a drawing before welding.

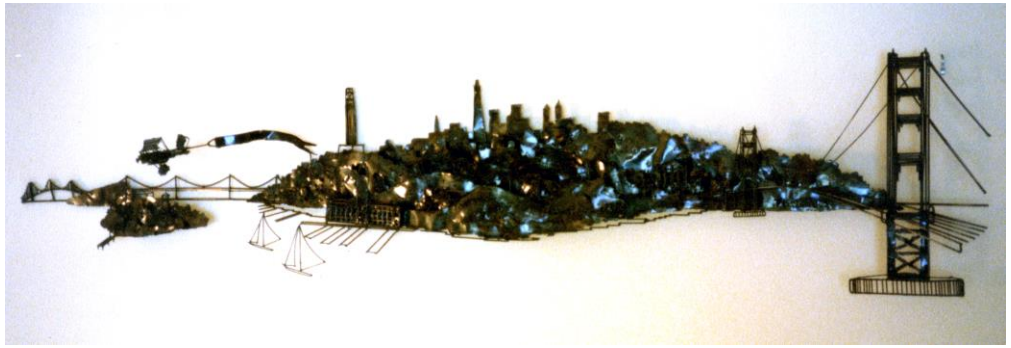
Motorcross

Old West



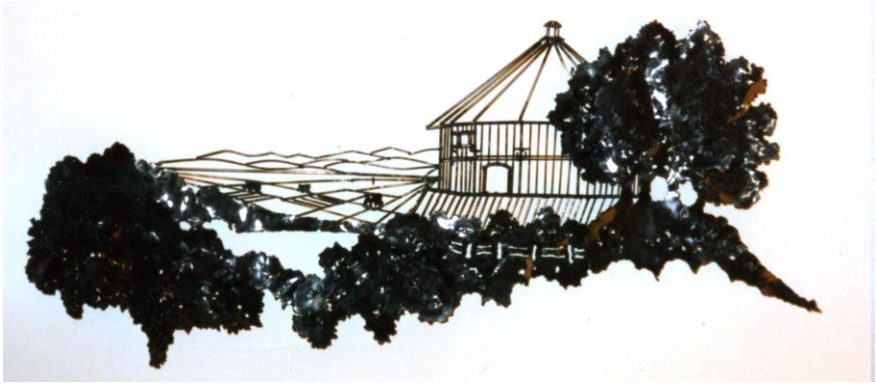
Berkeley Tower

Fly fishing

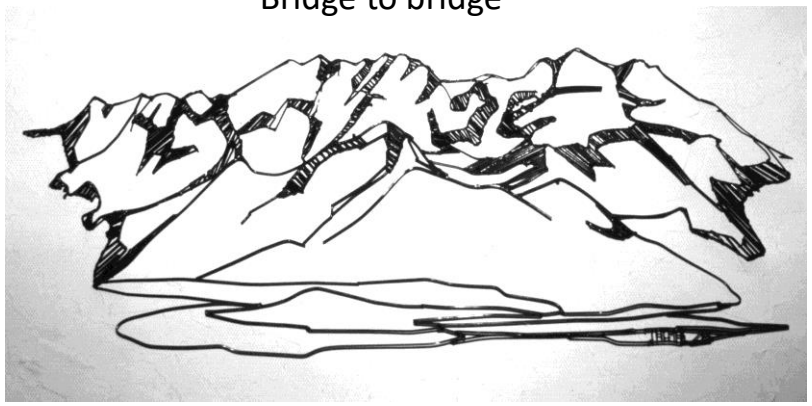


Bridge to bridge

Racehorse



Fountaingrove and the Santa Rosa plain

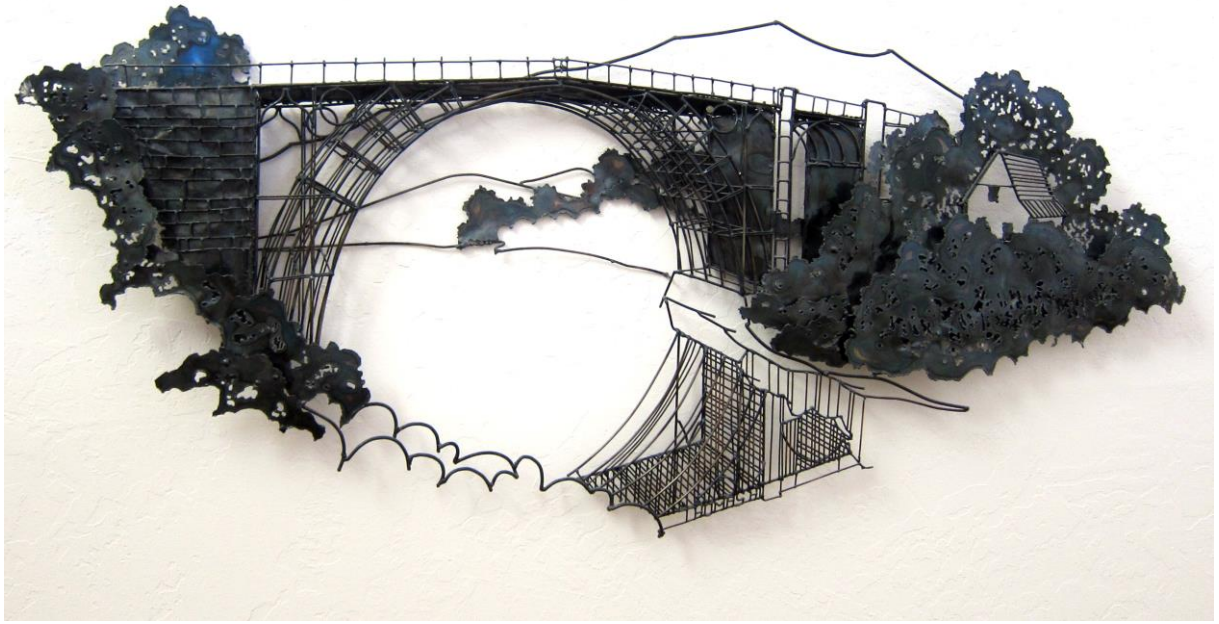


New Mexico mountain view

Commissions works continued

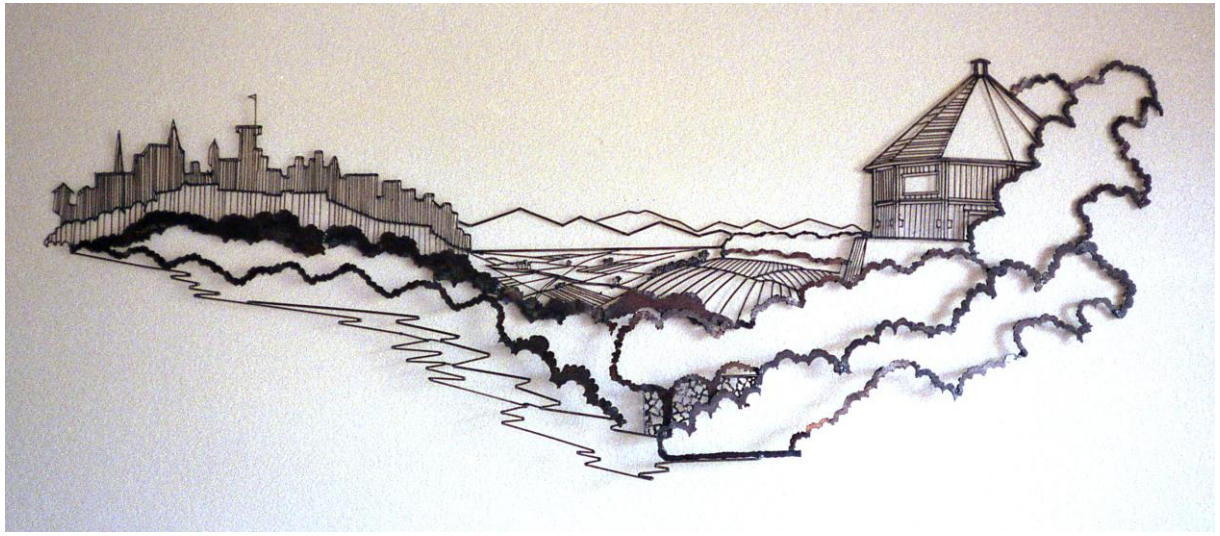
Iron Bridge in Shropshire

Jim and Margaret Lyons commissioned this wall hanging of the famous Shropshire iron bridge built in 1792 to demonstrate the local's foundry capabilities.



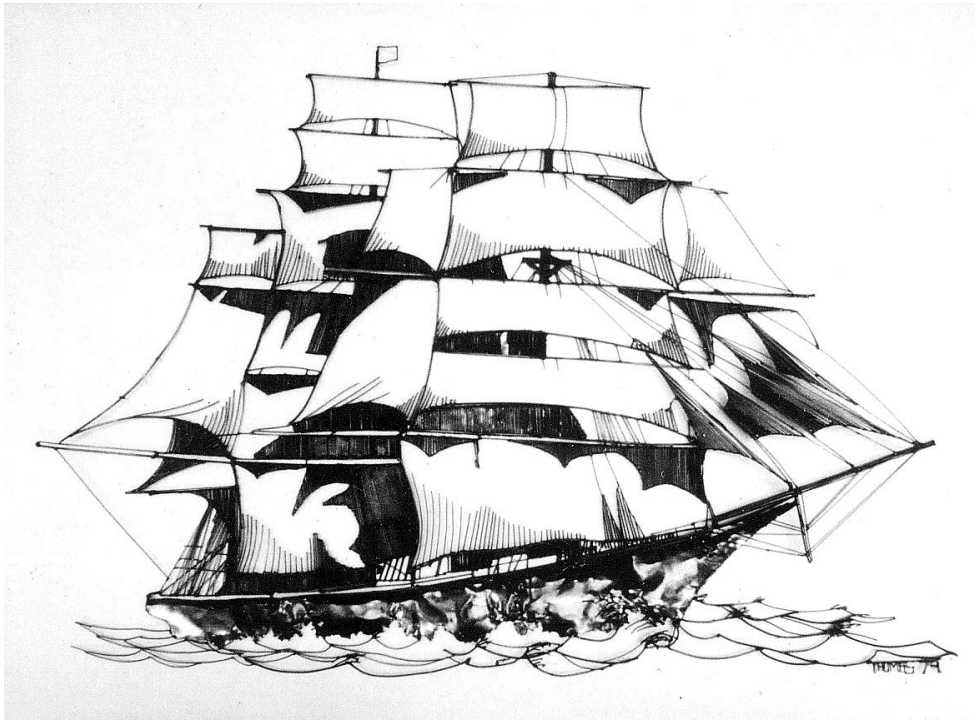
Fountaingrove and Edinburgh

Lorenzo and Kerri from Santa Rosa spent several years in Scotland for HP. They commissioned me to create a sculpture that showed their fondness for both.



The Cutty Sark

Marty Wood, who owned a print shop that printed documents for the Santa Rosa division ordered this sculpture of the British cutter to hang in their front office. It's 4 feet wide.

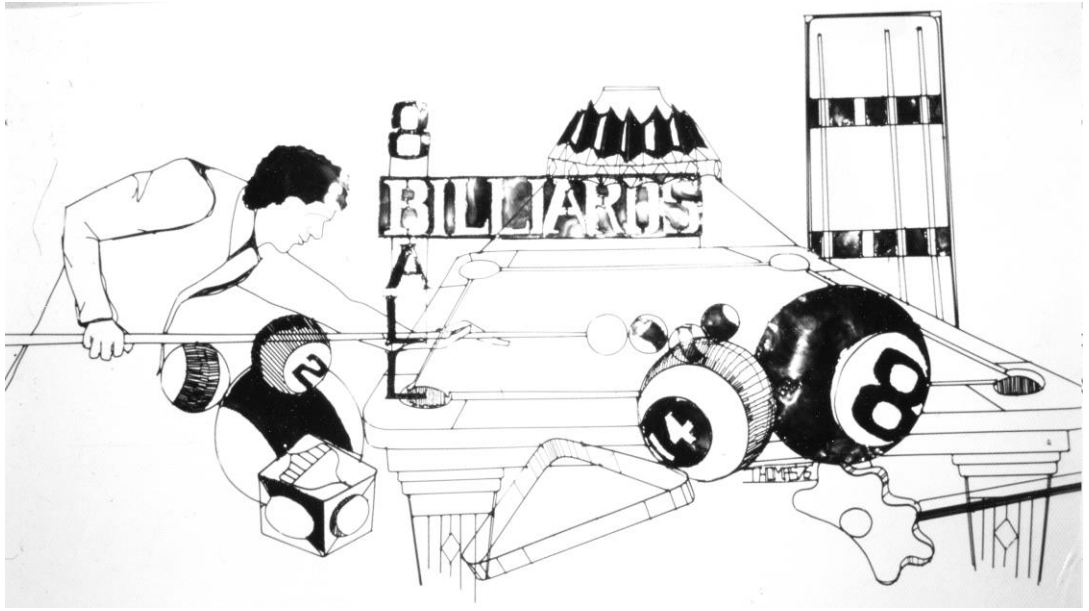


A Cabin in Oklahoma

Sam Scott of HP was surprised by his girlfriend who had photos of the cabin Scott's family lived in. He left when he was just 16. The photos pictured the cabin and his favorite refuge overlooking a river. I designed it from photographs she smuggled to me. He was quite taken by it.

Game Room Decor

Customer wanted to decorate his game room with a picture of his favorite game. It’s six feet across.

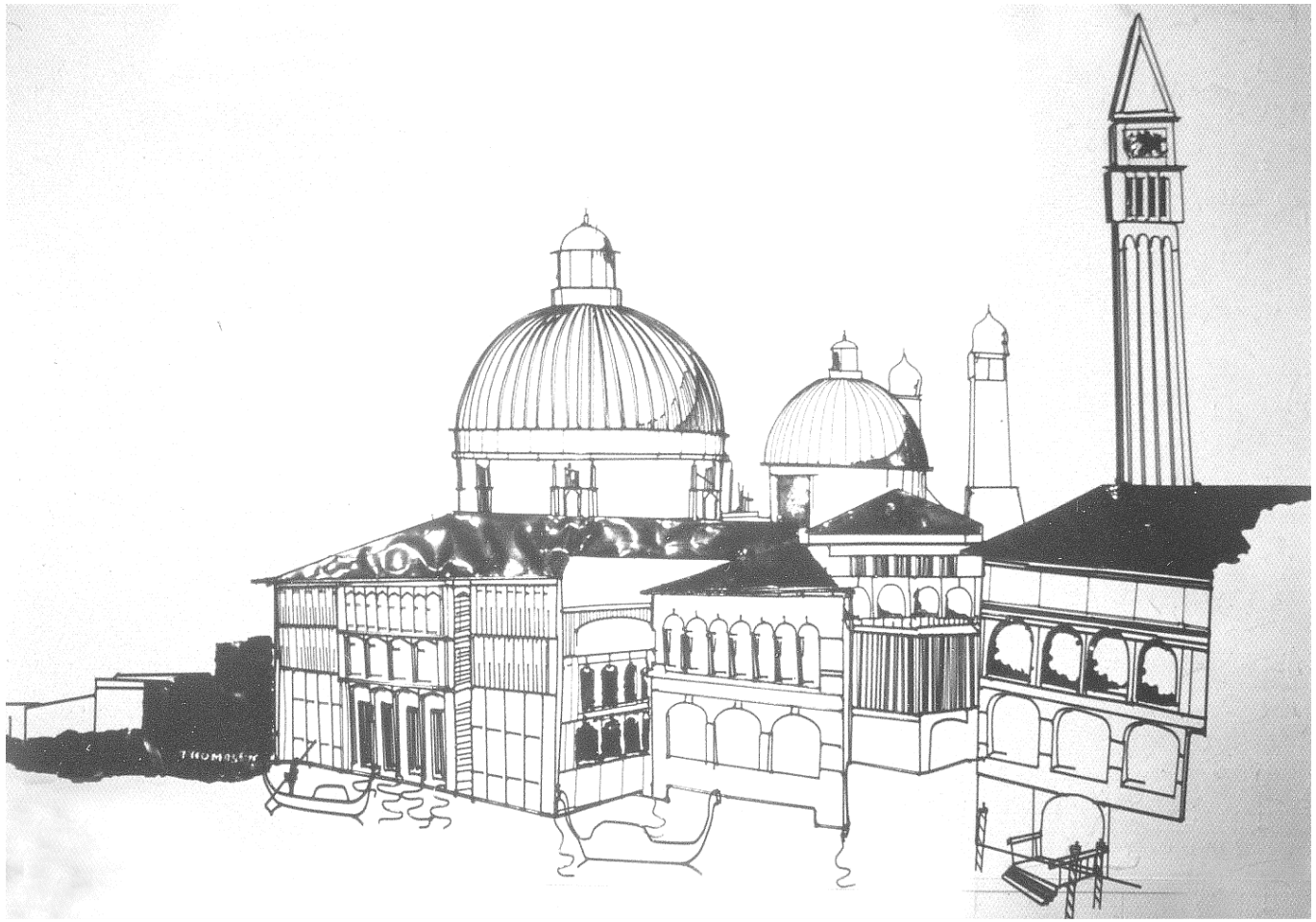


Black Power Salute

Aaron Kennedy was a fellow product manager in the 5 upper Palo Alto site of the RF and microwave marketing group sat in the early ’70s. He commissioned this 3-foot-tall piece to put above his fireplace.
A symbol of the black power movement, especially after some of the athletes at the Olympics raised their fists on the winner's podium.

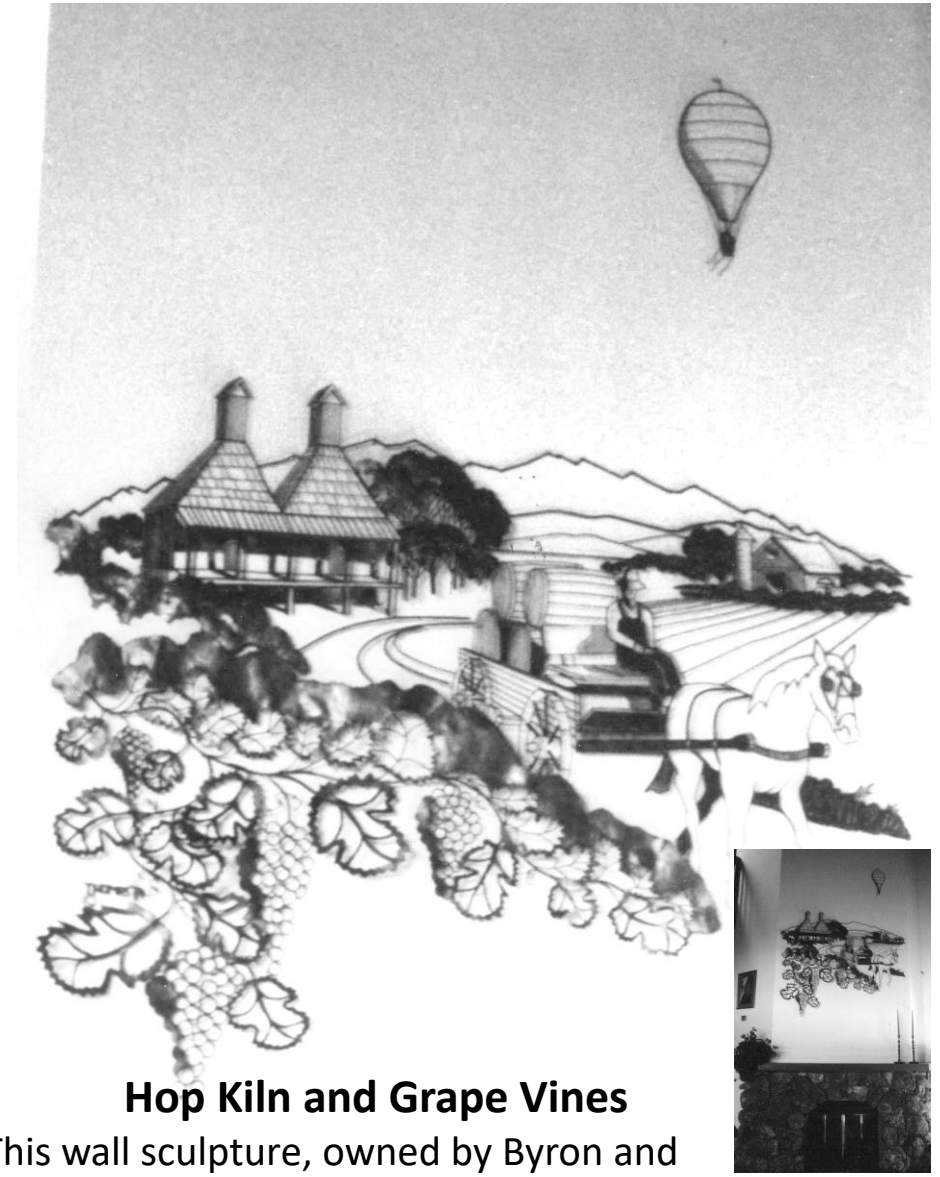
Doge's Palace in Venice

One of my first commission landscapes that did not involve San Francisco was this scene for Julius Botka of HP. At six feet wide, it was the largest piece I had done as of 1976. Because it was hung on a wall by foot traffic, all the perspective was in the drawing's design, with little physical depth.



Wine Press

A favorite theme in Sonoma County, this sculpture is a sample of many pieces with wine themes I've done. Russ Johnson owns this one.

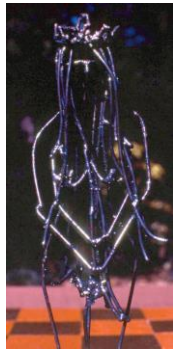


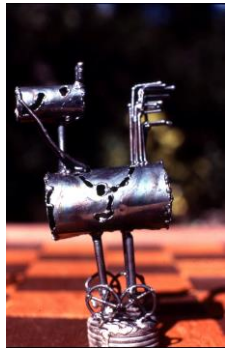
Hop Kiln and Grape Vines

This wall sculpture, owned by Byron and Linda Anderson, is a composite of two Sonoma County industries, wine and hops for beer. The piece is 6 feet wide. I apologize that I didn't take a better photo.

Karren's Chess Set

Karren Reyburn, a graphic designer at HP, ordered a custom chess set for her husband Marv. I chose a knights-of-the-round-table theme. Marv later built a beautiful board for the pieces, matching the squares to fit the pieces' sizes.





Marv’s Wonder Bread Factory

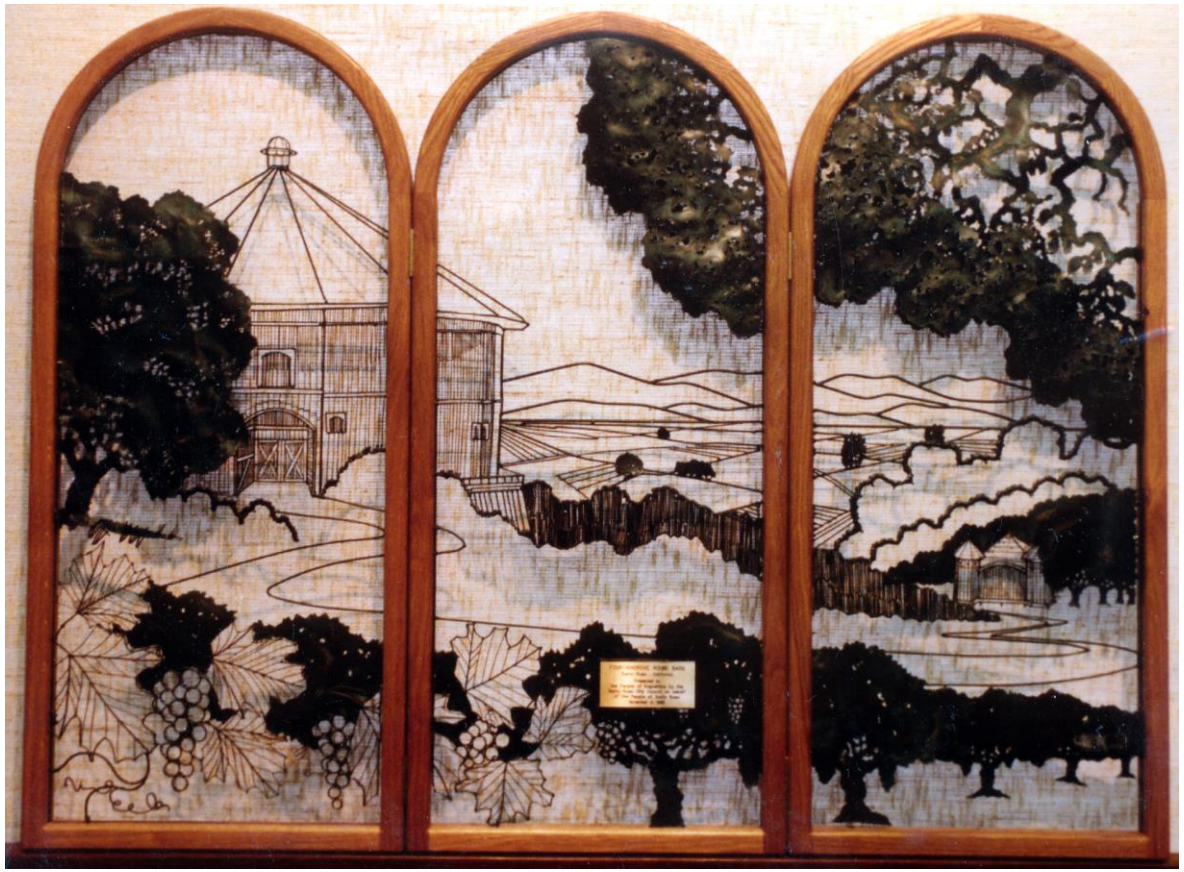
Karren’s husband Marv was manager of the Oakland Wonder Bread factory. She commissioned me to make a sculpture caricature of the plant and arranged a tour for me to see the workings. I couldn’t take a camera in, so I did sketches.

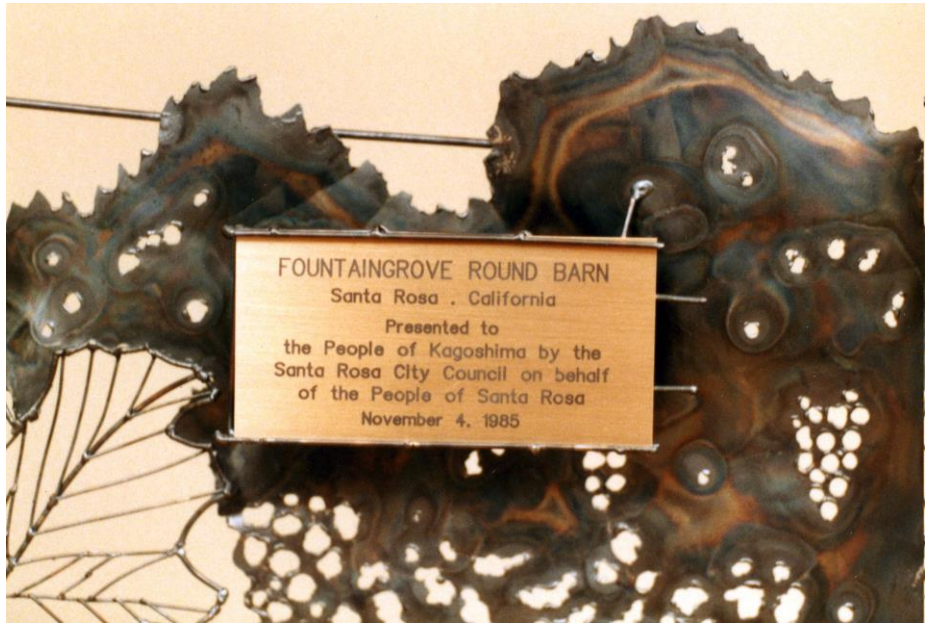
I used golf balls to represent the dough. Starting at the top, they self-feed, one at a time, going through gates so they end up in one of the four troughs at the bottom. The troughs are labeled Twinkies, Ding Dongs, Cupcakes and HoHos.

Along the production line I tried to represent the mixing vats, bread pans, ovens, and wrapping stations.

A Gift to Santa Rosa's Sister City in Japan

In 1985 our sister city, Kagoshima, presented us with a bust of their native son, Kanaye Nagasawa, who developed a thriving winery on the Fountaingrove property near the Keysight division. The 60-inch-wide elegant triptych frame was built by the local furniture maker, David Wood. The piece is in the Kagoshima city museum.





HP Internal Awards

CATV Amplifier

In the late ‘60s, HP had a full-court press to use their microelectronic expertise to enter the cable television signal distribution business by providing broad-band RF amplifiers to the cable installation companies. Our marketing department was charged with selling to the industry leaders. This sculpture, with an amplifier as the navel of the figure, was used in an internal display in a dog and pony show to internal management.

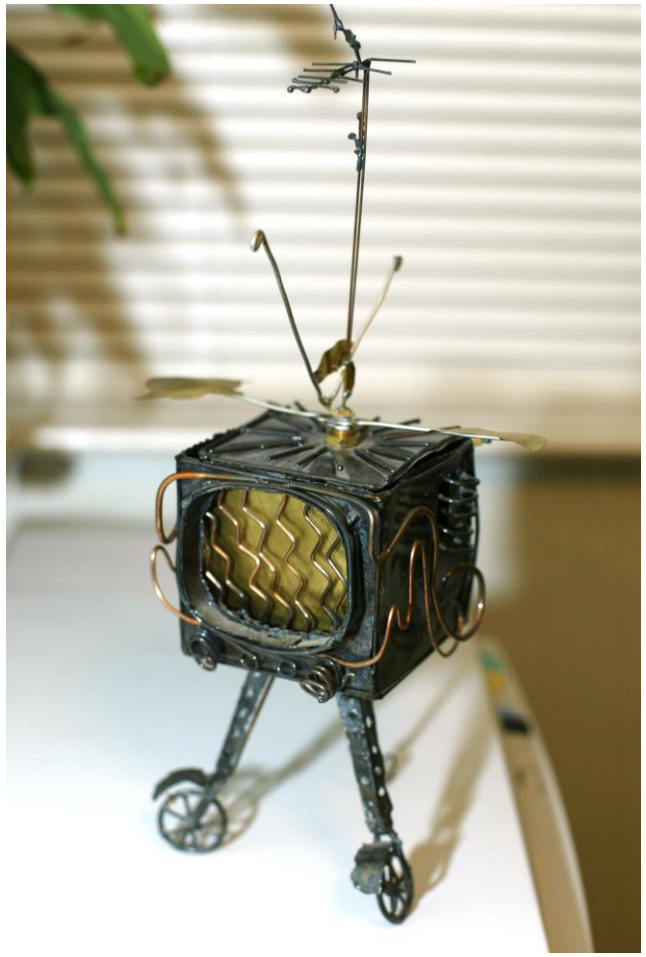
System Engineer Award

In the early ’80s I built this IEEE/HPIB cable sculpture award for one of our system engineers. I don’t remember for who or why, though.

Selling to CATV Companies

In the mid-’90s the Santa Rosa division was selling spectrum analyzers to the cable television industry to test for FCC compliance. To spark interest among our sales force I built these “TV Interference Clocks” as awards to those salespeople who were successful.

The clockworks inside drove the pointer as the hour hand, the rabbit ears as the minute hand and the antenna on top as the second hand.



The Fountaingrove Scene

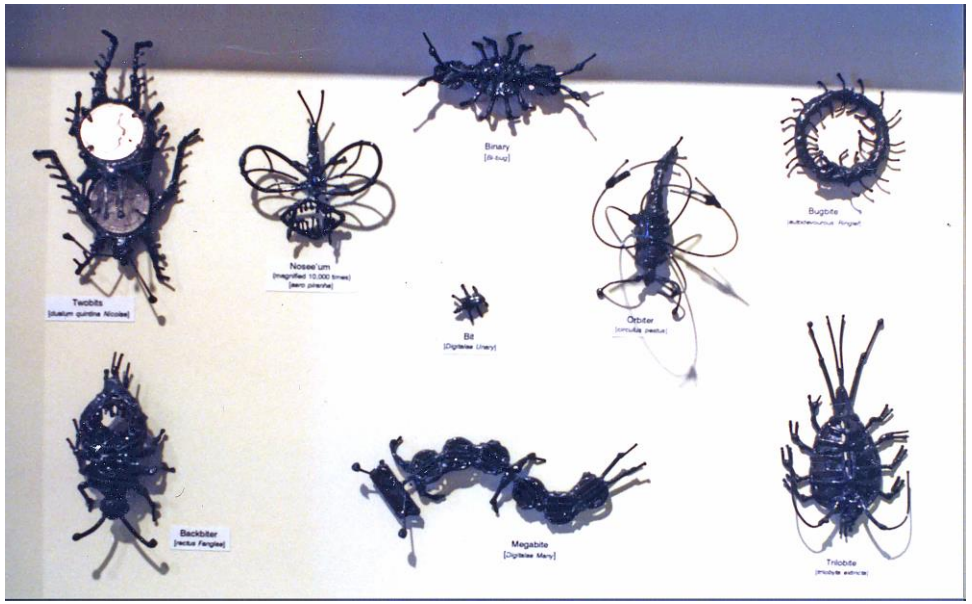
Just after I retired in 2002, I received a commission for this Fountaingrove scene as the center attraction in Mike Powers' home in Santa Rosa. I built it in four parts and at 11 feet wide it was a challenge to hang 15 feet up the wall.

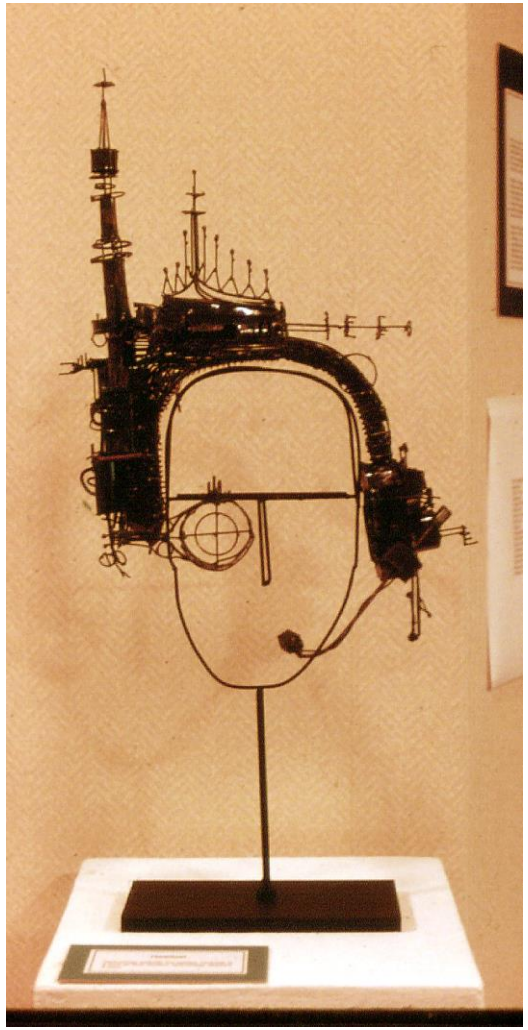
Works for Me

The following pages show pieces I designed and built for my own amusement.

Specimen Drawer for the Digital Age

Beginning in the ‘80s when computers became common, industries were going from analog to digital. I made a drawer of digital terms: bit, two-bit (two quarters at the upper left), bight, megabite, bugbite, and trilobite.



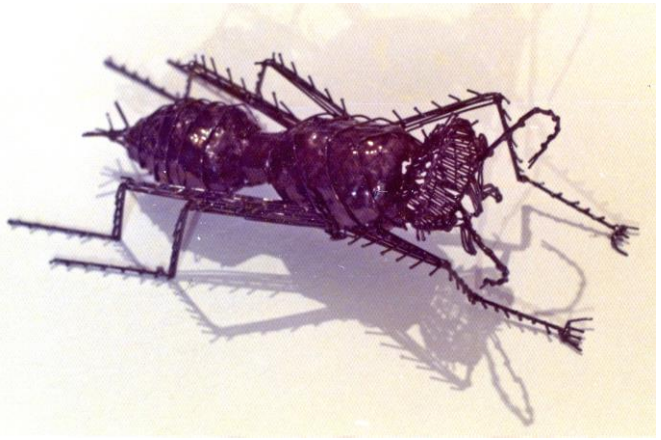


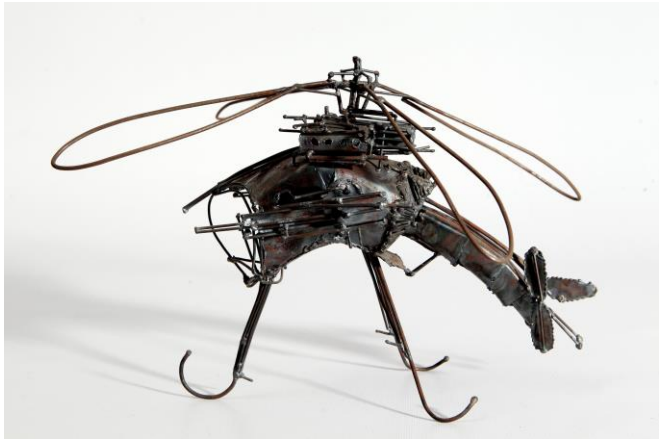
The Personal Communication Set

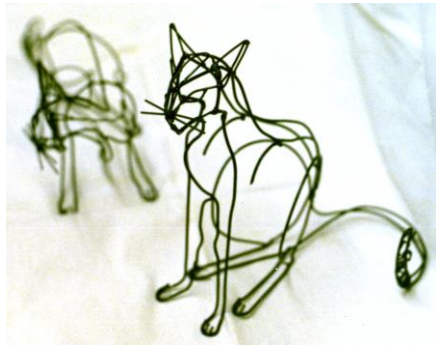
Long before smartphones and the internet I thought we all needed a device we could wear to communicate with each other. Here it is, on a stand for exhibition and modeled by Debbie Overberg, a sales engineer from the Signal Analysis Division.

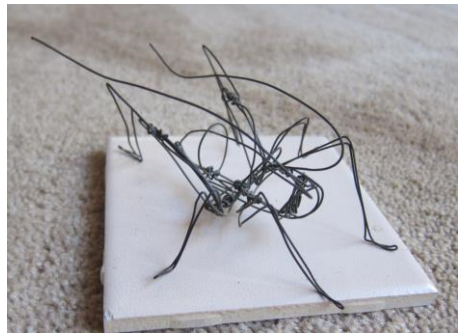
More Critters

Here is a selection of creatures I've built over the years.







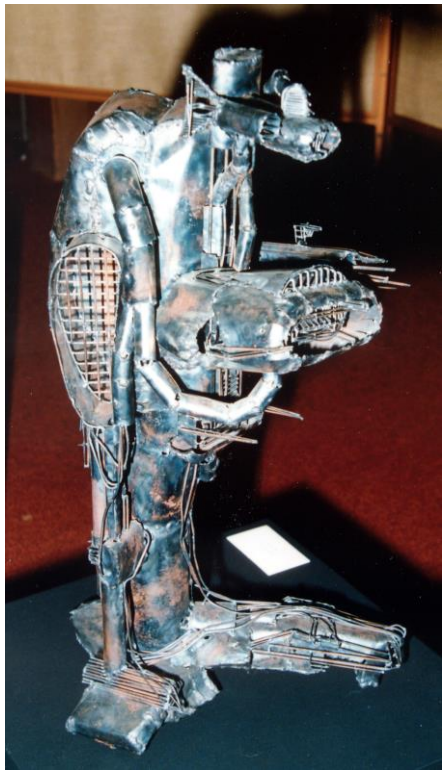


Do Not Spindle, Fold or Mutilate

The slogan on bills in the mail when computers took their instructions by IBM punch cards were "**Do not fold, spindle or mutilate**." Well, I made a device for doing just that. Insert card at the top, turn the crank, and open the box to see the card, or, back in the day, your electric bill.

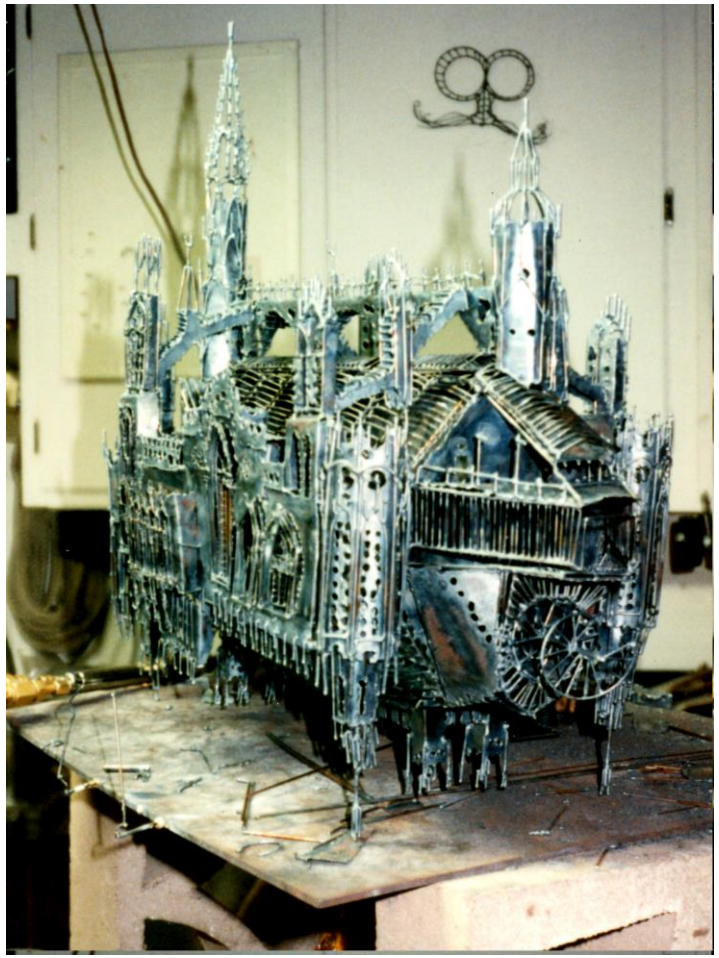
Abstract Sculptures

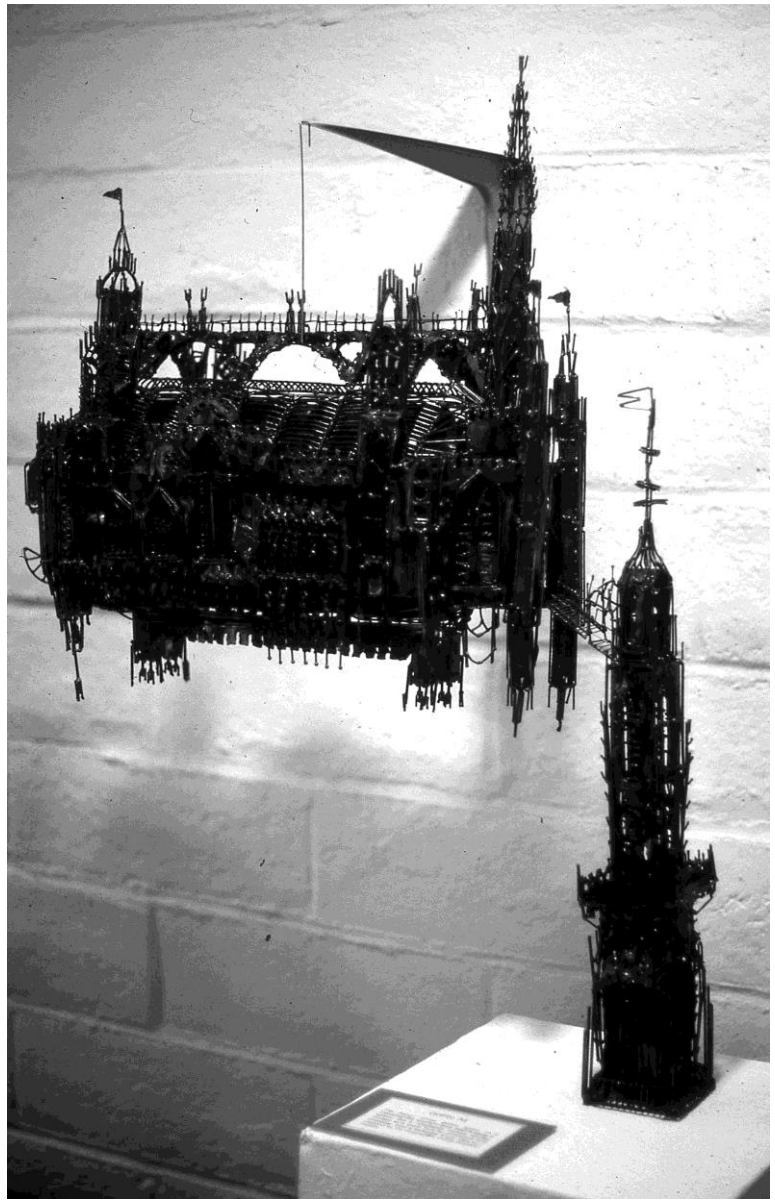
Through the years I built a few pieces that were strictly abstract musings. At right is an articulated one built right after my divorce. Below left is one I called Getting Down. To the right, The Sentinel.



Gothic Aircraft

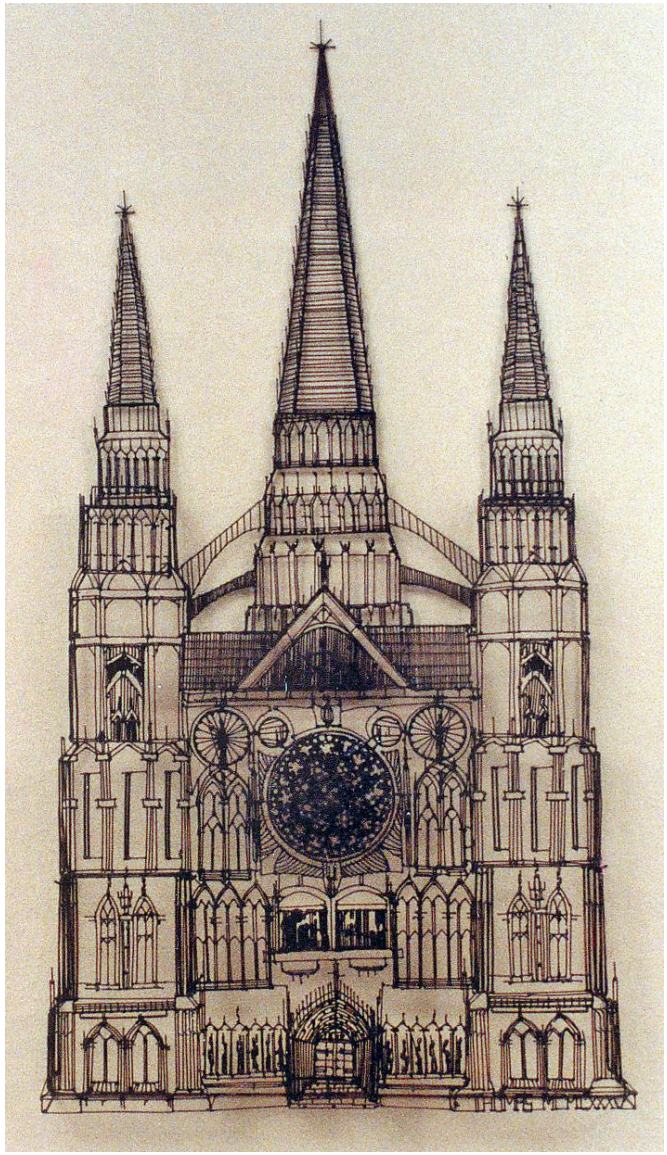
An airborne cathedral and docking tower.
I'm not sure what inspired this work, but it was a 3-D cousin of the following wall hanging.





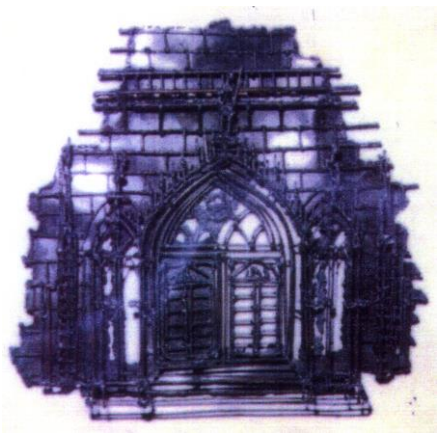
Cathedral Sketch

An imagined cathedral made of fine steel wire welded with a jeweler’s acetylene torch.



Windows

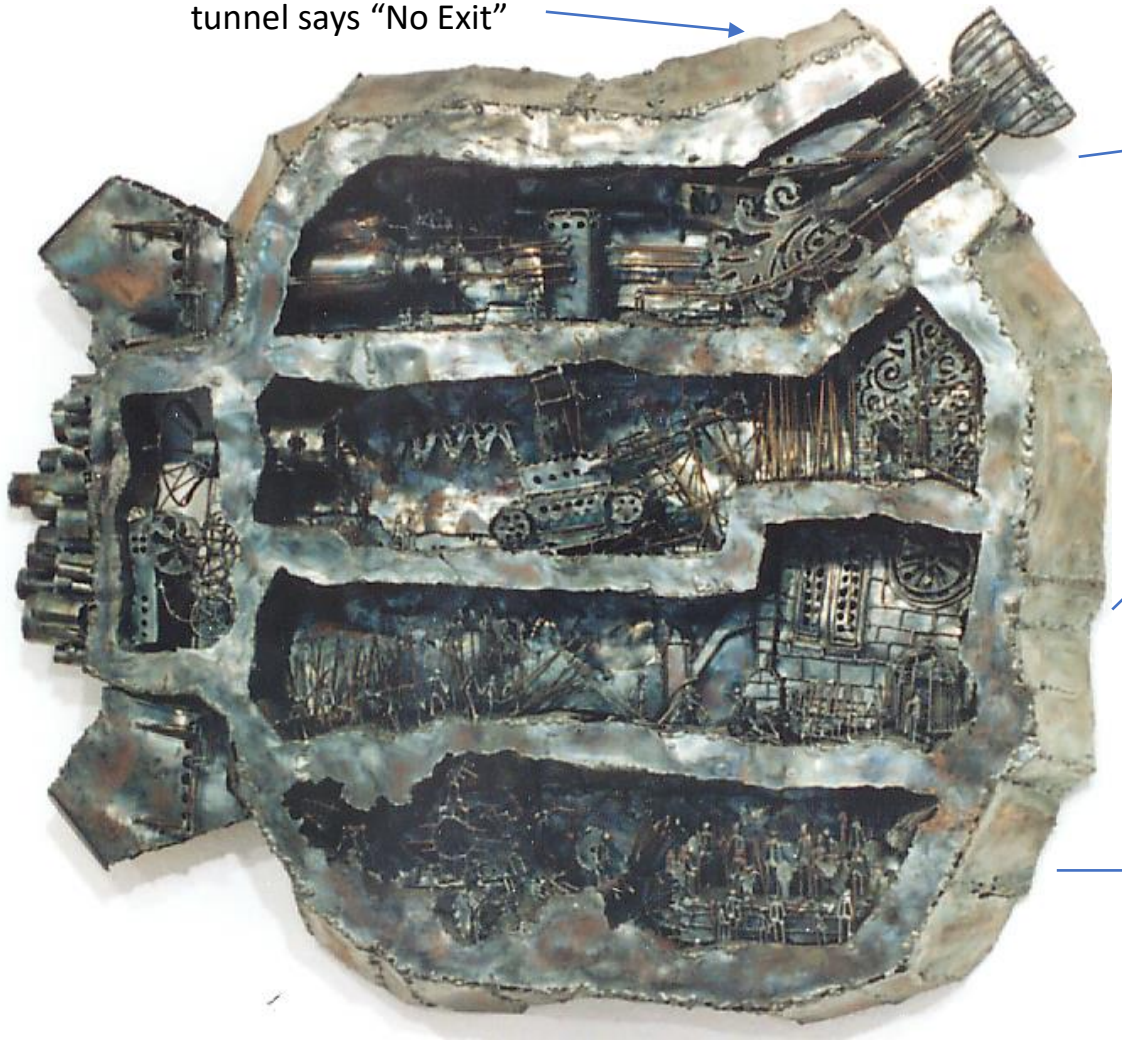
An imagined cathedral made of fine steel wire welded with a jeweler’s acetylene torch.

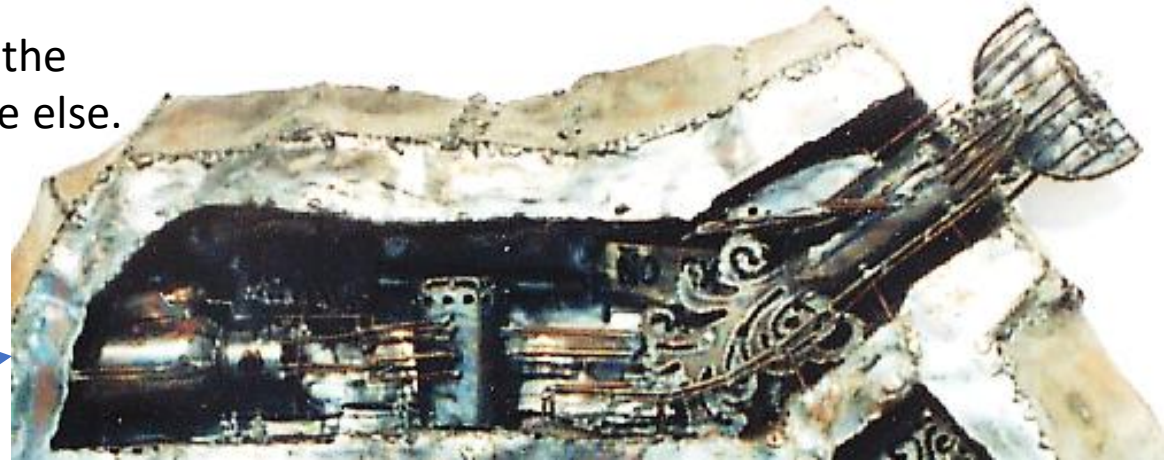


Earthcraft

A wall hanging piece representing the history of mankind on the planet, pointing out that we are probably not going anywhere else.

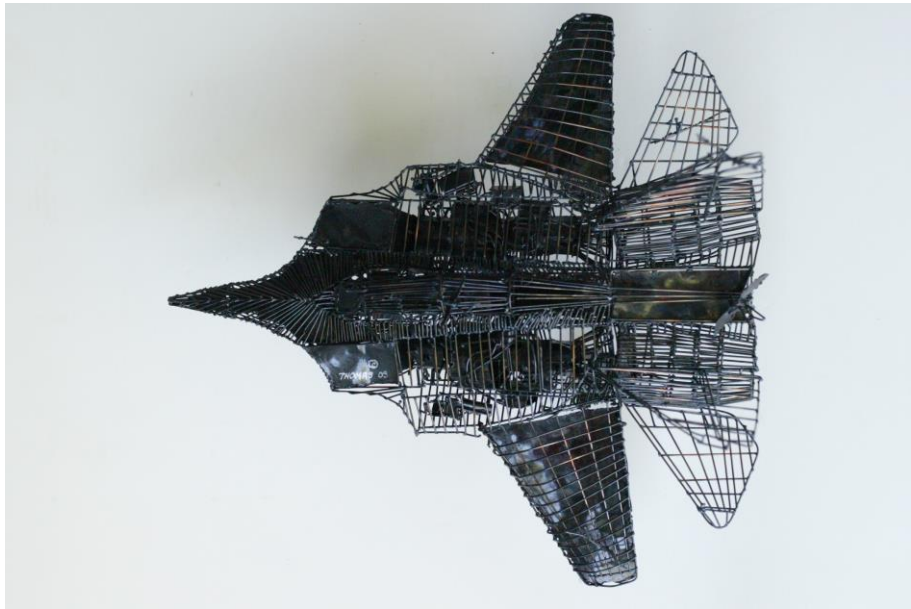
A sign at the rocket tunnel says “No Exit”





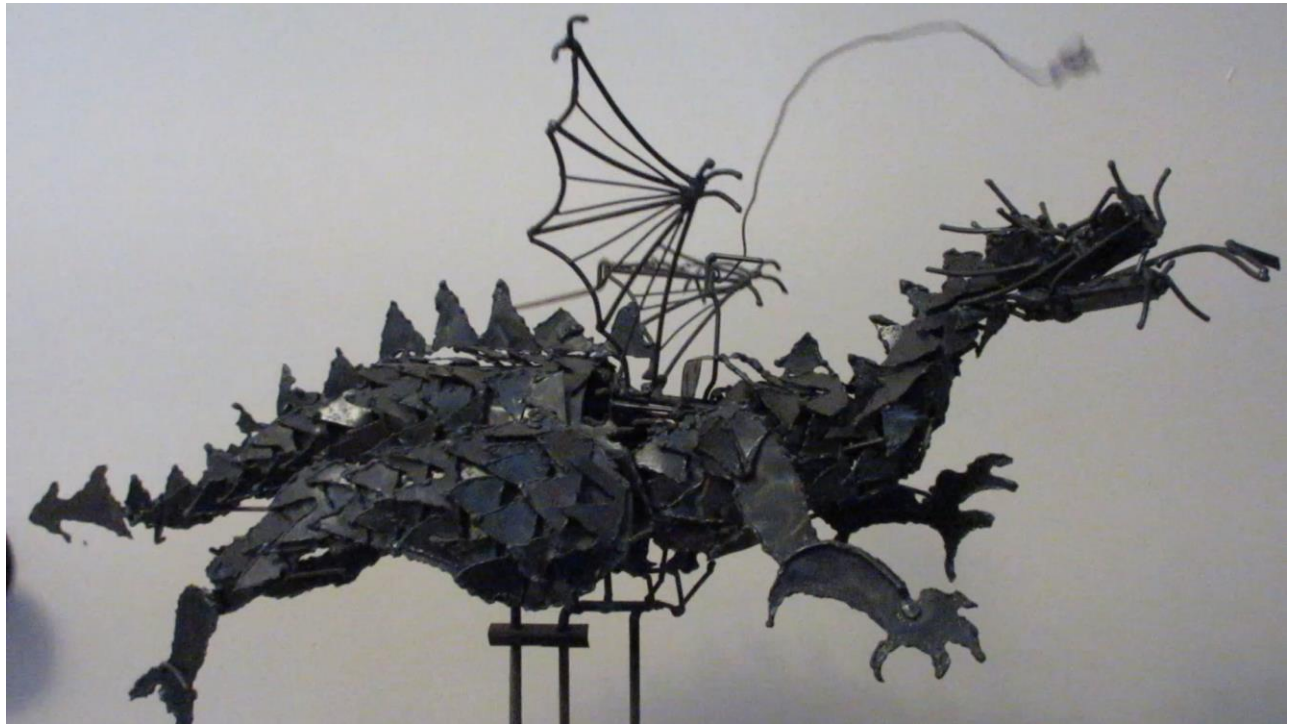
Birds of Pray

I'll leave the interpretation to you.



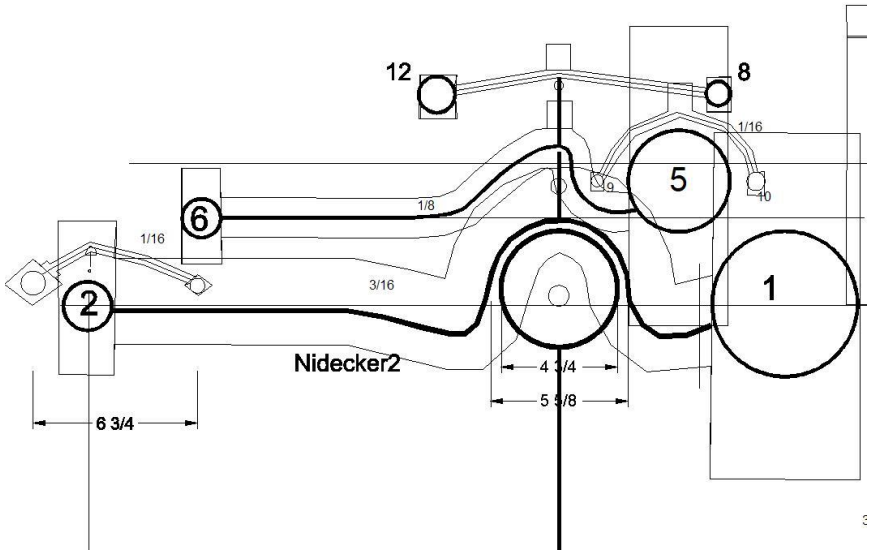
Flying Dragon with a Fly

The message – no matter how ferocious you are,
there will be something to annoying you.

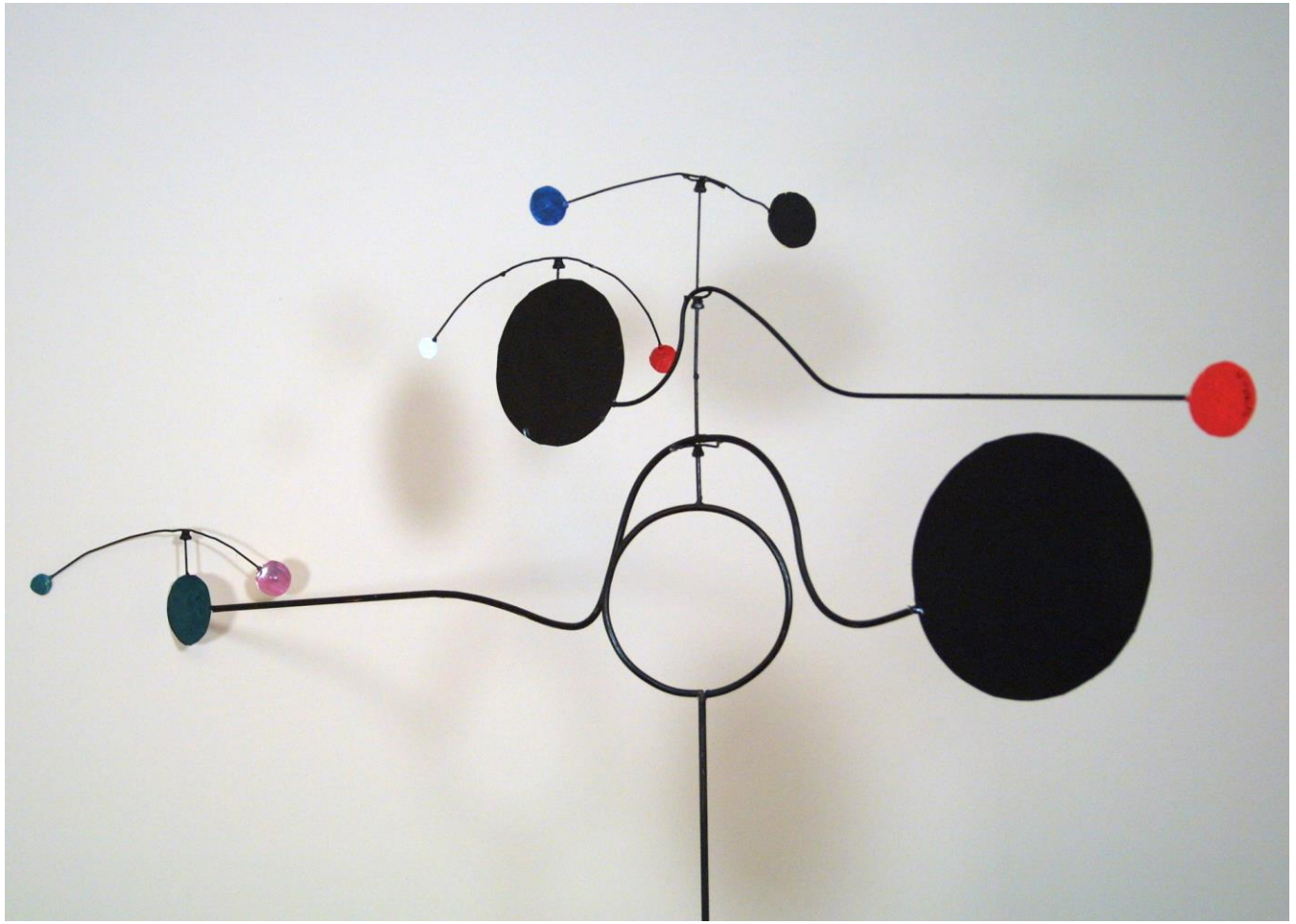


Mobiles – Sculptures that move with the air

I had always admired the balanced sculptures that Alexander Calder created out of wire and sheet metal. To produce mobiles that are ground-based rather than hanging, I used computer-aided design software DesignCAD 3D Max by IMSI Design.

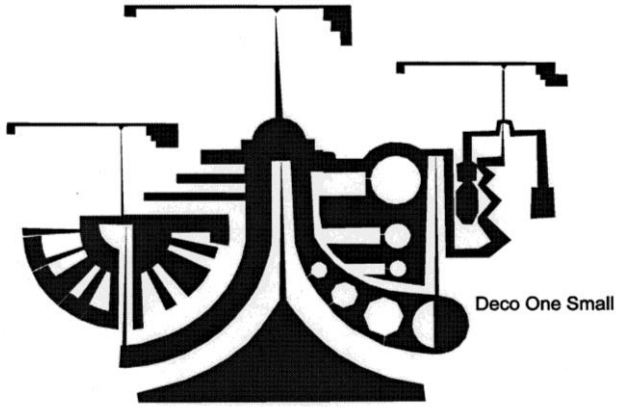


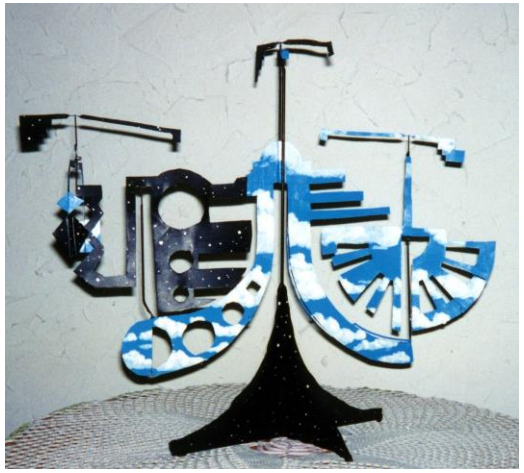
The design drawing



The finished mobile. Each piece balances on the level below, allowing each to spin.

Mobile Designs

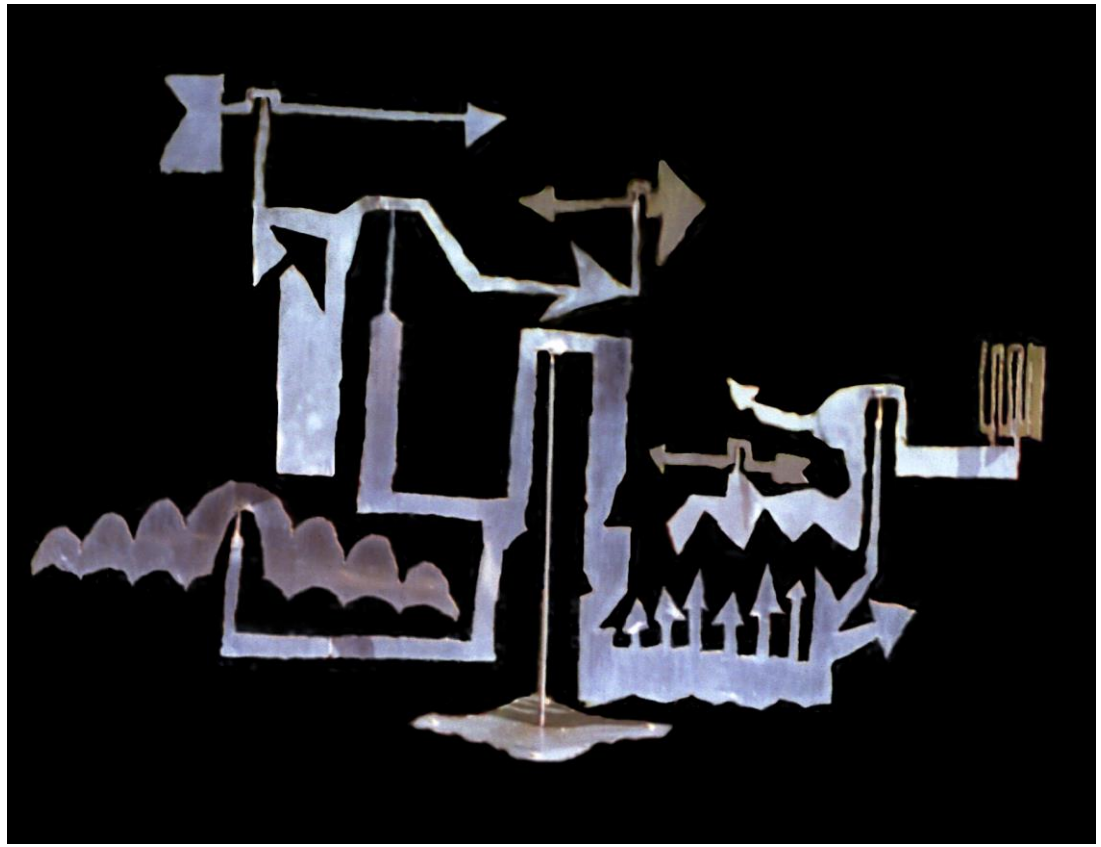




Art Deco One, painted by Celeste

Work-Life Balance
(not built)

For Blake Peterson's 40th Anniversary with HP



I included spectrum signatures of signal analysis that he often taught our new sales and marketing engineers.

Circles Mobile

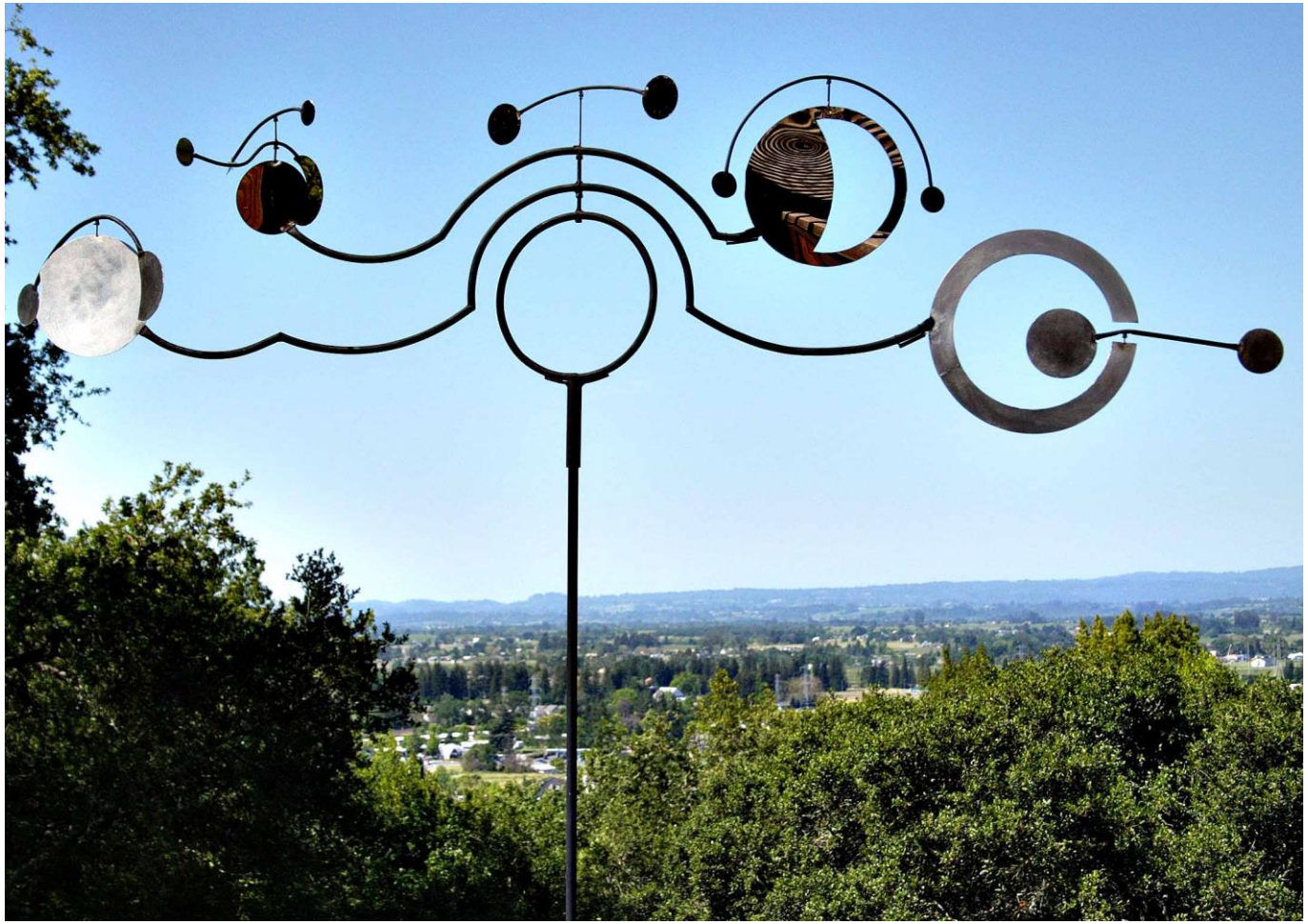
A stainless steel, wind driven sculpture for the yard

Each stage is balanced on the pivot point with its neighbor(s). The pivot is a simple pin and socket, with no fixed attachment. Gravity keeps it all together while the wind rotates the stages in unexpected ways. The larges circle is 18 inches in diameter.

Click on the picture to see the mobile in action. This is the current version, with a spinner at the small end. The two stages at the small end were lost when a bay tree fell on our yard. I replaced the last stage with the spinner.

Bartels' Mobile

Here's the most complex mobile I made. It's also the largest, at 10 feet wide. It was made of polished stainless steel so its movement would cast sun rays in the house. Unfortunately, the Bartels lost their home in the 2017 Tubbs wildfire, with temperatures high enough to melt the steel.



Thanks for looking!

My contact:
jefft2523@gmail.com