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## My Life With Hopper Company,

Aq, Oil, and War in Bakersfield, 1900-1960

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Bakersfield metalworking firms that preceded Hopper Machine
Works were serving the oil market immediately after 1899 when
oil was discovered just north of Bakersfield, California on the
Kern River. Metal fittings used for the wooden oil derricks needed
frequent repair, and because the oil business was a 24/7
operation, waiting weeks for parts meant lost production.

The road to and from Los Angeles in early days was long and dangerous. Even by the early 1920s, trucks like the 40-horsepower, chain-driven Bull Dog Mack broke down and delayed deliveries. John Cloes, a driver for Griffith Company, told me about an incident in 1920 when he had to re-babbit the main crankshaft bearings of his Mack after he broke down near Sandberg's on the old Ridge Route. He finally made it into Bakersfield, but he was a week late. Train

service from Los Angeles machine shops could be faster, but if parts didn't fit, they might just as well have come from the moon.

Hopper Machine Works was not the first iron foundry in Bakersfield to supply oil and farm businesses, but Kratzmeyer's was, and it deserves mentioning. In 1896 Gus Kratzmeyer opened a foundry in the area of 20th and 21st Streets and H and Eye Streets. When A.J. Webster and William Busse bought it in 1899 they renamed it Kern County Foundry and Machine Works.

The discovery of oil on the Kern River greatly boosted the foundry business. In 1900 Webster had 15 men on the payroll, but orders came in so fast he ahd to double the work force. By 1901 he operated seven forges. In 1903 Webster sold the company to Kern Valley Bank, and in 1906, Charles H. Allison, AJ Crites, William Coleman, F. Sprague, and CA Barlow owned the shop. The name was then Allison Machinery. By 1907 it had become Allison and Coleman Iron Works. About 1920, owners Arthur S. Crites and George Hay found a higher use for the property and tore it down.<sup>2</sup> But this story has more to do with another shop.

<sup>&</sup>lt;sup>1</sup> Rudy, Lynn Hay. *Old Bakersfield: Sites and Landmarks, 1875-1915*, pg 104. Kratzmeyer hired AJ Webster as manager and William Busse as pattern maker. Rudy posits that the foundry was initially started by the Kern County Land Co. where Kratzmeyer was an employee.

<sup>&</sup>lt;sup>2</sup> Rudy, p 104



The demand for oilfield repair and parts spelled opportunity for early mechanical types like Frank Hopper, Sr. The story of Hopper's Machine Works traces back to 1899 when oilmen Canfield & Chanslor were shipping 70,000 barrels of crude a month from Coalinga. They also operated Bakersfield Iron Works, which was a foundry they owned at 24th and M Streets in Bakersfield.

When I started at Hoppers in the early 1950s, some of old Bakersfield Iron Works was still there in the form of a building called the Sprague Pump Shop in the southwest corner of Hoppers yard at 24<sup>th</sup> and M Street. Because of the name, Sprague, I'd always assumed it was independently owned, but he was an investor from the old Kern County Foundry and Machine Works. In late 1953 or early 1954 a heavy windstorm came up and threatened to blow the building away. This was on a Saturday and I was the only engineer

<sup>&</sup>lt;sup>3</sup> Margaret Leslie Davis, *Dark Side of Fortune*. U. of California Press, 2001

on the premises, so I took the initiative and ordered a truck moved up against the building to brace it. Frank Hopper, Jr. arrived soon after and yelled, "Don, what the hell are you doing? Let the g-d thing blow over. We're moving. You screwed-up! Now we can't collect on the insurance."

In the early years of oil development the need for immediate repairs prompted firms like Johns Manville at Lompoc, Monolith Cement at Monolith, Standard Oil at Taft, and American Potash at Trona to build their own machine shops, forges and foundries.

Smaller companies relied on local shops for work. Sometime around 1912, Frank A. Hopper, Sr. established a one-man machine shop on China Grade Loop near the Kern River Oilfields.

In those days there were many small-shop owners, but branch operations of larger oilfield equipment manufacturers soon came to Kern County. One of those was Midway Fishing Tool, just south of today's Kern County Museum. Across from them on North Chester Avenue was Baash Ross, a machine shop that supplied drilling tools as well as shop work.

The Bakersfield Petroleum Club once displayed a framed copy of "Plate XVI, dated 1914." The drawing shows an "80-foot standard rig," which is a pure cable-tool drilling and pumping rig. A very

 $<sup>^4</sup>$  May 25, 1915 is the earliest entry of the F.A. Hopper name at Kern County Hall of Records.

<sup>&</sup>lt;sup>5</sup> Midway Fishing was owned by the Jones family. My father-in-law, Louie Sabbatini, worked the night shift at Midway Fishing for many years. Fred Bonaventuri also worked there as a machinist.

excellent and well-executed replica of that kind of derrick is on the grounds of the Kern County Museum. "Plate XVI" also shows a "106-foot standard rig." A replica at Taft Oil Museum is somewhat less authentic because it was constructed with bolts instead of nails, as were the originals. The "106-foot standard rig" as an accurate replica would combine all the cable tool drilling and pumping apparatus of the 80-foot rig as well as rotary drilling equipment. Drillers of the past would use the faster rotary method until they expected to soon enter an oil strata. Then the crew switched to cable tool to inch-down into the formation. Inchingdown was necessary because the weight of the column of drilling mud might cause the drill hole to push past the oil pocket. If drillers had been drinking, this was even more likely.

I first saw "Plate XVI" years ago in the hands of my dad. It was wrinkled, well-used and printed on linen-backed paper. He'd showed it to me because he wanted to get me interested in building a scale-model rig. My dad had even cut timber for an inch-to-the-foot model. It was too ambitious a project at the time for my age.

The point of that story is my dad had "Plate XVI, dated 1914" in his possession. The drawing marked the hesitant, transition point between cable tool and rotary drilling. In 1930 he bought the Trojan lease out on the Maricopa flats. Around 1909 the original owners had drilled well #1 with cable tools, but around 1914 they'd used rotary for wells #2, #3, and #4. Drilling

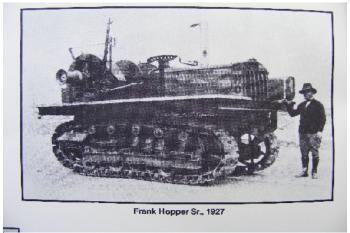
technology had advanced to rotary drilling during those five years. For foundry/forge/machine shops around the area, that period brought a sea-change in the demand for supporting services.

The change to rotary drilling had much to do with the demise of local iron foundries and forge shops. During this time, steel fabrication came of age with the introduction of electric welding, and from then on, the work of machine shops was much given to reworking, or refurbishing "drilling tool joints," or the threaded ends of rotary drill pipe. Wear and damage to these regularly occurred from the less-than-gentle way that drilling floor "roughnecks" screwed and unscrewed the drill pipe joints.

Mickey Lukes, my employer during the summer of 1942, as well as my father-in-law, Louis Sabbatini, and his brother-in-law Fred Bonaventuri were all artisans in the art of turning (refurbishing) "tool joints." Mickey Lukes offered to teach me the craft but when I asked him if he was going to pay me for it, he said No, and I turned him down. (Snotty nosed 17 year-old!)

As confidence grew with rotary drilling, there was no longer a need for the cable tool portion of the "standard rig." A Eureka moment came when bright souls across the nation came up with modular drilling, servicing, and pumping equipment. The advent of axles and tires that could carry the weight also aided the trend. The photo below from an early oil supply catalog shows Frank Hopper, Sr. standing next to a well-servicing winch mounted on a

Holt (Now Caterpillar) Tractor. The unit allowed pulling pipe from a well that had no derrick.



An early version of a Hopper Hoist.
Oil Industry "Composite Catalogs" of the era illustrated other configurations of Hopper-Hoists. [DSCF0532.JPG]

On the same page of the brochure a caption dates Frank
Hopper's entrance into oil field manufacturing: "Since 1912 Hopper
has pioneered in the development of self-propelled well-servicing
units." This suggests that Frank Hopper, Sr, was ahead of his
competition from a very early period.



Don Hopper is standing in front of a 1981 Hopper Hoistmobile just before its departure to a Texas destination. DSCF0533

The availability of modular equipment and the proliferation of well-servicing contractors meant there was no need for oil companies to have permanent derricks at their wells. By this time, anyway, wooden derricks were generally considered unsafe; in fact, many had blown over. Still, thousands of producing oil wells had wooden derricks standing over them, and that old technology stood in the way of production. An undated picture taken in the Midway Sunset Oilfield shows "Petroleum Avenue." It's a forest of wooden derricks, but according to my earliest memories, (circa 1935), Standard Oil had already replaced the most prominent rows in that picture with steel derricks.

About that time I was begging my dad to let me climb a derrick. He finally gave in and took me across the road to a Standard Oil steel derrick that had safety cages and landings all the way up. We climbed to the top. In my den today I have color photographs that we took from the top, at the crown block. I mention this because it was a comparatively safe experience compared to climbing a "real" wooden derrick with its unprotected ladders, rusty nails, and split boards.

When I was a kid I must have wished that my dad had steel derricks on his Trojan lease because I remember to this day the

price of an Emsco steel derrick: About \$5,000. That amount sounds ridiculously low today, but working forward from 1935 shows that steel derricks were expensive even then. If you double \$5,000 (to get the erection cost) and multiply by the inflation price of oil, (72/1), then a steel derrick would cost about \$720,000 today. Yes, one could say there was a substantial incentive to find something cheaper to get the job done than erecting a permanent, steel derrick.

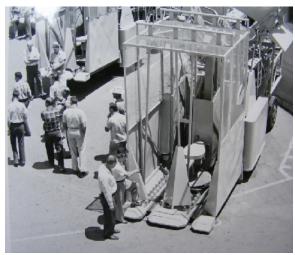
Frank Hopper, Sr, discovered a cheaper way: the portable derrick, or mast, mounted on a truck or trailer and integrated with a hoist. It gave him a great business opportunity. Unitized pumping units like those can be seen along California Avenue Extension or China Grade Loop today.



Photo: Trailerized hoist and mast portion of a Hopper drilling rig heading east on Hwy 58 to Texas (abt 1970). - DSCF0423

With these changes in technology, Standard Oil and other oil companies found it economically wiser to contract their well

drilling and well-servicing to independent firms. After the oil companies got rid of their servicing rigs, Hopper, which had been a major manufacturer, saw an immediate drop in orders for new rigs. Hopper reorganized, expanding its steel service center for the manufacture of agricultural machinery, such as the caster bean harvester.



Hopper delivers 10 caster bean harvesters to owners. Center front, Frank Hopper Jr., points out mechanism to Mark Rainey, Manager of Agricultural Operations of Kern County Land Co. Others in photo are owners or operators. (abt 1963) - DSCF0343.JPG

Lew Suverkrop, my dad, had been an army sound-ranging officer during World War I. He was a graduate from the Michigan College of Mines with a degree in Mine Engineering, and he'd worked in Peru for a time for the Southern Peru Copper Company. Returning to the USA about 1920 he applied for work with the U.S. Bureau of Mines in Washington, D.C. and accepted an assignment to build a "camp" just west of Taft, California.

This was a difficult assignment for the Bureau to staff because rumor had reached Washington, and my dad had heard it, that the heat in Taft was killing. My dad figured that heat was preferable to the debilitating effects (for a smoker) of the 15,000-foot elevation that he had experienced in Peru. So he accepted.

The camp he designed an office building, six or eight residences and a playground. After completing that assignment he continued on as an inspector for the same government agency in inspecting oil wells for compliance with regulations. It was rather mundane. His real love was machine work, and there is a reason for that. In 1895 my dad was born on the 2<sup>nd</sup> floor of his parents' residence at Camden, New Jersey. Downstairs was his father's machine shop. I'm sure Dad gained his love of things mechanical by the simple process of osmosis while playing amongst the chips on the machine shop floor.

Dad worked out of Taft, and even though he was on official duty, his inclinations made it difficult for him to drive past Frank Hopper, Sr's machine shop on China Grade Loop Road near the Kern River oil fields. Their conversations must have given my dad pleasant respites from inspections, and I suspect that lots of whiskey lubricated the day for both.

One of Hopper's customers was Tidewater Associated Oil

Company located nearby. George Suman, long-time superintendent for

Tidewater, discovered that it was much cheaper for Frank Hopper do their machine work than for Tidewater to take it to their Bakersfield Iron Works shop on 24th Street in Bakersfield.

My father told me that during one of his visits at Hopper's machine shop, Hopper confided to him that George Suman offered the 24th Street operation to Hopper for so modest a sum that Mr.

Hopper figured he couldn't refuse it even if he didn't want it.

The story goes that Hopper drove his Model-T truck into

Bakersfield in order to take a mental inventory of the shops.

Walking out back to the "0" street side of the property he realized that there was more value in the scrap pile than what George Suman was asking for the entire building and grounds of Bakersfield Iron Works.

Frank scratched his head and figured that if he got a loan to buy the business, he could pay back the bank by just selling off the scrap metal. So, he got the loan, took over the Tidewater shop, and in short time paid back the loan. I once related my dad's story to Donald V. Hopper and Frank Hopper, Jr. They denied any knowledge of these absolute facts, but one of them remarked, "It sure sounds like our dad. He was pretty shrewd."

In 1927 the Bakersfield Californian wrote that Frank Hopper,

Sr. had secured a site in Bakersfield where he would erect a new

 $<sup>^{6}</sup>$  This is where Freeway 178 enters Bakersfield city streets from the east.

Kern County Hall of Records, MTG 0190-0251. Jul 19, 1927 FA Hopper, Bakersfield Iron Works,

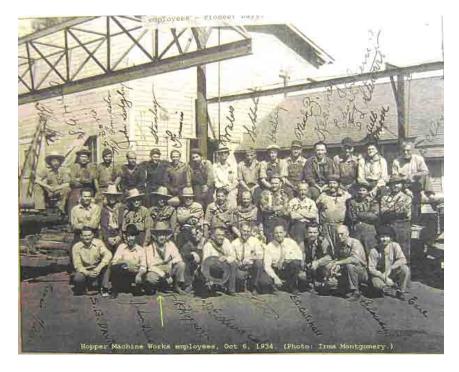
and modern foundry and machine works. The paper added that products made by Hopper Machine Works, then on the Kern River, were "being shipped to companies all over the world." After Hopper moved to his new location at 24th and L Streets, he was shipping products to the Baku oil fields and to the Dutch East Indies. 9 Hoppers was opereating 24 hours a day.

Sometime in the latter 1920s my dad opened a firm called Oilfields Engineering Service that provided geological and petroleum engineering consulting. His office in Taft and one he opened in Los Angeles did well, and about 1928 he acquired the 60-acre Trojan Oil Lease on the eastern edge of the Maricopa flats. He also bought the Kimble oil property of 550-acres northwest of McKittrick and adjacent Highway 33.

Beecher Rintoul, the father of writer and newspaperman Bill Rintoul, was manager of Western Waterworks. In 1937 Mr. Rintoul and 15-year old Bill came out to our Trojan lease to talk to my dad about supplying us water. Young Bill started using foul language, like my dad often did, and after a few words Bill's father told him, "Don't talk like that." Maybe that was good advice. After the war, Bill attended Stanford University and earned a Master's Degree in Journalism.

<sup>&</sup>lt;sup>8</sup> Apr 25, 1927 , Bakersfield Californian

<sup>9</sup> Aug 4, 1927, Bakersfield Californian



At arrow above: Frank A. Hopper, Sr., 1934

Oil was a dollar a barrel in the 1930s. Production from wells #3 and #4 on my dad's lease fed into a 1000-barrel shipping tank.

When full, it was mostly water except for maybe 300 barrels of oil floating on top. The 300 barrels was a month's production, and at a dollar a barrel, that \$300 in the Thirties was a lot of money.

My father hired a kid from Maricopa High School to go out periodically and drain the water out from under the oil. On one occasion the kid opened the valve and then promptly went to sleep.

All the water, and the oil too, drained out toward Buena Vista Lake. In the depth of the depression it was quite a loss. This happened about the same time that a grocer named Gus Ergo, who had a small store near Beale Park, dropped by our house and took

possession of one of our family cars. It was payment for our \$300 grocery bill.

My dad was a frequent customer of a blueprint company located on G street near 16th, about a half-block south of Truxtun. At some point the owner approached him about buying the business. My dad didn't want it, but he knew a certain Capt. Earl Price who'd been in the US Army and had recently arrived in town.

How my dad struck up an acquaintance with Capt. Price I have no clue, but in any event my dad suggested to Price that he buy the blueprint business, which he did in 1927 for the sum of \$2,000. During WW II, Earl tried repeatedly to get back into military service, in any capacity. Even though he exchanged much correspondence with his West Point classmate Dwight D. Eisenhower, the Army always refused Earl. One of my last recollections of Capt. Price was his interest in my own World War II battle experiences. I sensed envy.

By today's standards, Price had unusual blueprint equipment. In the early 1930s blueprint companies rolled-out glass tables into the sunlight to expose the blueprints. Passer-bys couldn't miss the tables because of the fumes. Another blueprint device was a glass cylinder about three-feet in diameter and perhaps ten-feet tall. Drawings and blueprint paper were wrapped around the glass and exposed to an electric arc light that moved up and down inside the glass.

In June 1962 Price sold the company to McGrath. McGrath did a lot of business with Hoppers, and then McGrath sold to Hoven & Co. While I worked at Hoppers I designed a copy-camera for Hoven. This camera occupied an entire room about 40-feet long that was bisected by a wall, which housed the lens. The film was mounted on a moveable panel about five-feet high. Anyway, Hoven then sold to Robert T. Bogan. By that time it was the largest engineering supply company in the area. Bogan's later became Bakersfield Envelope, and now it's Bakersfield Envelope & Printing.

The Hopper name changed to fit the market place. From

Bakersfield Iron Works, to Hopper Machine Works, Inc, and finally
to Hopper, Inc. My first familiarity with the company came about

1936 when my dad brought Hopper a welding job so small that Fred

Jones, on being asked for the price, responded, "We'll catch up
with you next time." I was in the 7th or 8th grade at Emerson

Junior High then and would ride my bike down M Street and linger
around the shops on 24th before biking back home.

Pearl Harbor came in December 1941, and in months Bakersfield was gearing up for the war effort. Lockheed took over Haberfelde's Ice rink, at 24<sup>th</sup> and Golden State Avenue, to manufacture aircraft sub-assemblies. Mary Bonaventuri, wife of Jim Bonaventuri, manned a riveting gun there after her husband closed his bar next door to the Nile Theatre and volunteered for the Army Air Force. He went

to Minter Field, and each afternoon his skill at playing poker maintained the morale of the base commander.



Haberfelde Steel Foundry, Bakersfield, CA, (1942) (Bakersfield Californian)

There were several metal working shops in Bakersfield then.

In 1942 Kern River Foundry was on 34th Street next to Jake

Vanderley's forge shop, and over on 21st Street off Union Avenue

was Mickey Lukes' Hall Machine Works. Haberfelde Steel Company

built a steel foundry on 21st Street about three blocks west of

Union Avenue and just north of Central Park. Haberfelde's electric

furnaces poured molten steel into six-foot diameter ladles that

were carried by heavy bridge cranes. The steel was then poured

into molds, and the castings formed essential parts for Liberty

Ships, then being built at Kaiser's Richmond Ship Yard.

In 1942 at a Bay Area forge shop, my dad and I stood in awe outside the fence watching sweaty forge-men dancing with their three-story-high forge machines. At each thunderous impact, the ground shook and the night sky lit-up as those white-hot billets took on the rough shape of ship propeller shafts.

The rough-forged shafts were shipped by rail to Hoppers in Bakersfeild to be machined into finished tail shafts. Getting to that point took ingenuity because machine tool parts were in short supply, or they were simply not available after being sent to the bottom of the Atlantic by German submarines.

Hopper engineers and machinists solved the problem of working the rough shafts by designing and building enormous lathes.

Oilfield-casing threading machines were put to work as head stocks, and railroad tracks were mounted on concrete foundations to form lathe beds. Did these "Rube Goldbergs" work? Oh, yes. I watched in amazement as blue-hot, nine-inch spirals as big as my finger curled off the cutting tools. Finished shafts were transported to Kaiser's Richmond Ship Yard.

In 1945 I was on a troop ship delayed in a typhoon off
Okinawa. I watched the propellers of other ships in the convoy
rise up fully out of the ocean, come crashing back down. Then the
ships' bows would rise fully out of the sea.

The huge, violent sea-saw motions demonstrated the strength of those propeller shafts we machined in Bakersfield. I thought about that because in summer 1942 I had been an apprentice at Hall Machine Works at 21st Street and Union. My job was turning-out cast iron wheels on a 20-inch lathe. I never did know what the wheels were for, but this was my introduction to carbide tool bits. The owner had to go out and buy a special grinder in order

to sharpen the harder cutting bits. Carbide bits were helping to win the war.

Because of my dad's interest in inventing and developing surveying instruments, in the 1930s he built a small shop at the rear of our residence at 109 H Street and stocked it with several small machine tools for making precision parts. The machines were also useful in teaching me, his 13 year-old son, how to run them.

Our 16-inch Gould & Eberhardt shaper and the 13-inch LeBlond lathe came from the Dodge dealer at Bakersfield Garage across the street from the Fox Theater. Those machine tools had been idled because car dealers were going through the same transition from locally-manufactured repair parts to "store bought goods" shipped in from Los Angeles. I helped my dad convert these "abandoned" machine tools from line-shaft drive to individual, electric-motor drive. This was my playground.

In 1942, Adel Hydraulics in Burbank, manufacturers of aircraft hydraulic valves, was suddenly overloaded with war production orders. In need of independent contractors, they sent Max Trickey, their broker, around the state to find outside shops. Trickey had already contracted some work with Bill McKenny Air Conditioning here in town, and in mid-1942 Bill referred Max Trickey to my parents because Bill heard we had a lathe and that my dad and I could make things.

My dad was in the East then, and my mom answered the door.

She sent Trickey back to the shop, and when he saw me he seemed visibly disappointed at having to deal with a 17 year-old kid.

Trickey, however, gathered his composure and then held up a small part between his thumb and forefinger. "Can you make this?" I looked at it, glanced at the drawings, and responded casually, "Yes, sure." Max shot back, "Well, we're going to have to have samples. When can I see them?" I said, "How about tomorrow?"

When he showed up the next day, I'd already tooled up a South Bend lathe with a tail stock and carriage turrets. Trickey was in awe as he watched me turn-out the parts and precisely check their dimensions. Without so much as a goodbye, he darted out the door and disappeared around the house to meet with my mother. That evening she phoned Dad in Washington, D.C. to tell him not to worry about getting war production business because we were already in it.



Lew Suverkrop's garage, war production shop, 1943

Soon we had 30 or 40 friends and neighbors working in our back yard deburring parts. The work fell quickly into place, but scheduling toilets was an immediate problem. My parents solved it by having the women use the one in the house, and the men the one in the shop.



Inside the shop, Mostyn Miller (left); Lew Suverkrop(arrow); my mom, Beth Suverkrop (center above light); behind her Mostyn's son Howard Miller. 1942

Before our defense contracts came to an end in early 1944, my dad must have had about six lathes going. I remember a South Bend, a Logan, a LeBlond, and a Potter. We also had a milling machine and a shaper. After we closed the shop, I volunteered for the Army.



Suverkrop war production shop, "Drill press row"

Back in the late 1920s, Frank Hopper, Sr. hired a young civil engineer named R. E. (Pete) Gignoux [juh-NEW]. By 1930 Frank wished to retire and offered Pete an incentive, based on profit, to manage the company. Frank then retired to San Jose, but neither men could have predicted World War II and how the war would boost company profits. Because of all that wartime business, Pete Gignoux wound up owning a majority interest in Hopper Machine Works.

After I got out of the Army I took several jobs to fit around my course schedule at Bakersfield College. In the fall of 1946 I worked afternoons at Gillette Machine Shop located in a Quonset hut on Kentucky Street a few doors west of Baker Street. One day, owner Steve Gillette asked me to make a worm for a worm gear set.

After setting up the change gears for this very course, lead device, I was in fear of stripping the "pot metal" gears on Gillette's cheap Atlas lathe. In explaining this to him, I asked what I should do. He answered, "Do it." I did, and the gears stripped. Christ, he was mad.

My second employer was Kimble Pump Co., and my third employer was Johnson Valve located just south of Floyds Store on the same side of Chester Avenue. At a Christmas party, employees presented owner Owen Johnson with a lovely silver tray. Owen stood up and then looked down at the tray for the longest time. Finally his wife piped up, "Owen, say something! Say thank you." Owen Johnson had done very well for himself in business, but his language skills never matched his manual skills. He was not alone.

Bakersfield was loaded with well-servicing millionaires who had been blessed by the companies that had opted out of servicing their own wells.

In February 1949 I was newly-married, and my wife and I were living in Berkeley, California, where I was going to school. I graduated from the U.C. School of Engineering in June 1951. We returned to Bakersfield, and I worked for my dad for seven months. He had invented a very successful plumb bob, and we were making them at home in our shop. One day I miss-stamped the weights on several of them, and he "fired" me. Going home to a pregnant wife

and a newly-mortgaged house, I was told in no uncertain terms to go out and get a job.

An hour later I interviewed with Helen Sargeant at Hopper Machine Works, Inc. After Helen went over my work history, she remarked, "Don, you're a bounder." It ass true that I had had a lot of jobs. Later in the day Frank Hopper, Jr. 10 hired me, but he warned, "Don, you keep your dad out of here. We don't want him coming in and taking over." Dad called me that evening and told me to come back to work in the morning. I just said I had a job. It was not the best example of "How to Win Friends and Influence People."

That was 1952. I took care of Hopper's business in steel castings with the Haberfelde steel foundry. Not long after that, Pacific Valve of Long Beach bought it, and the foundry was known as Pacific Southern Steel. I think the building was removed in the 1960s or early 1970s. A new housing development just north of Central Park is now on the property.

On my first day with Hoppers, my boss Roger Bartenstein sent me out to the welding shop yard to assist Glenn Galatin in figuring out how to build a cotton-stalk uprooting machine.

Everything went fine until I noticed that Glenn had become quiet.

In fact, he was just staring at me. Then he remarked evenly, "What

Frank Hopper's sons were Frank, Jr. and Don Hopper. Frank, Jr. was Hoppers Executive Vice President and Don was President. Don Hopper was known as Victor.

the f-k are you wearing a tie for?" My first day on the job was the last day that I ever wore a tie around the shops.

Hoppers had a contract for building and installing grain elevators at the Kern County Land Company's Gosford Feed Lot. Eric Hamreus, my mentor at Hoppers, was sales engineer. One day he, Jim Porter, and I were standing on a narrow catwalk, and behind Hamreus was a 90-foot fall. He took a step back and Jim Porter grabbed him. I learned what the color white was. Jim Porter's time to be saved came later when he got his hand stuck in a rotating lathe chuck. I took him to Doc over on Truxtun Avenue.



Grain elevator and tanks at Washburn Ranch. DSCF0251 - DSCF0258

In 1953 Hamreus sold a grain elevator and tanks to the
Washburn Ranch out on the Carrizo plains. I was appointed
supervisor of the installation crew that included Bill Napier, who
was a machine shop sweeper; George Kincaid, a machinist; Vester
Catlett, welder; and myself. Bill Napier got the master bedroom in
the ranch house, while I and the others slept out back under the

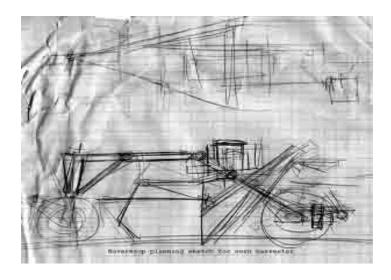
stars. For the whole two-week stint the food was great. An itinerant harvest crew was housed in a building nearby. You see, the grain farmers on the Carrizo plains, and those who ranched along the road to Paso Robles, depended on itinerant harvesting contractors to supply both labor and the grain combines.



Hopper Pipe Perforating Machine - DSCF0429

In 1953 Bill Dean, one of Hoppers' machinists, built a pipe perforating machine for M&M Perforating Company on Supply Row in Taft. The machine worked fine, but Bob Muxlow at M&M was very upset about what he considered excessive billing by Hoppers. His final statement as he stormed out of our office was "Well, I know when I'm being screwed, and I'm sure being f-d now." Nevertheless, Bob continued to do business with us, and so did his son.

Whiskey flowed freely in the earlier days. On Christmas Eve,
1953, I never did learn who gave me that Mickey out in Waldo
Mason's machine shop office. Hampton Lee (hoist-shop engineer)
drove me home that evening to a very angry wife.

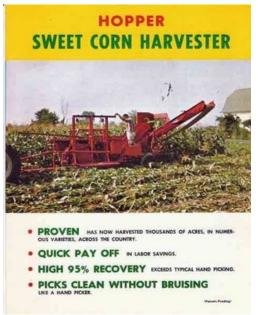


Above: Sweet Corn Harvester idea-sketch from my notebook



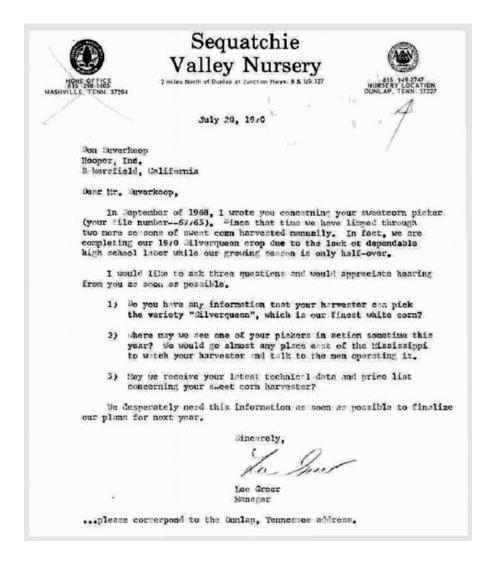
Hopper's Sweet Corn header mounted on a Massey Ferguson combine near Corcoran, CA DSCF0120

By 1954 Hoppers was much involved in building corn header attachments for grain combines. A corn header gathers, cuts, and feeds corn stalks into a grain combine where the corn kernels are separated from cobs and stalks. The technology for California conditions was first developed and patented by a grower in Northern California. We missed out on patenting it, but Hopper's sales were in the hundreds. Big business.



Corn Header. Picture taken near Toledo, OH

John Deere was taking notice of the interest in our Corn Header for field corn, and they ordered one of our machines through Davies Machinery at the corner of 24th and Golden State Avenue, just across the railroad tracks from us. Out of fear of loosing this product line to John Deere, I complained to Frank Hopper, and he said go see Doug Davies. I complained to Davies, and he brushed me aside with the words "Young man, you stick to the manufacturing and we'll stick to the dealing."



Urgent letter from a grower

In 1954 I was riding with Eric Hamreus, the sales engineer back then. We were in the company's green, 1947 Chevy business coupe heading home at about 65 miles an hour on old Highway 65. At Tea Pot Dome a car pulled out in front of us. Eric braked hard. The Chevy spun through a complete 360-degree circle and wound up again pointing toward Bakersfield, and what did he do? He stomped on the gas and remarked, "No point in stopping."

In the early machine shops, most tools were driven by belts powered by one long shaft along the length of a shop's ceiling. Initially, a steam engine turned the shaft; later a large electric motor. With improvements in electric motors it became more practical to install one electric motor on each machine tool. At Hopper's 24th Street shop in 1954 the "key seater" happened to be the last tool still driven by line-shaft drive. Bill Dean converted it to hydraulic drive, and that removed the last obstacle to moving over to the Espee Street location.

Machinist Jim Porter and I were sent to Stockton in 1955 to install a grain elevator at the Robinson Ranch. I booked lodgings for us in a downtown Stockton Motel which happened to be located at a traffic signal. After the first night, Jim angrily told me, "Hey, I refuse to sleep there again. All that noise from trucks braking and shifting gears kept me awake all night." I said, "Oh, I didn't hear a thing." Naturally, we moved to another motel, and Jim was happy again.

From 1956 through 1958 Hopper was much involved in building castor bean harvesters in cooperation with Kern County Land Company and the USDA at an Oklahoma experiment station. I worked closely with Ralph Arms, agronomist with Kern County Land Company and with Glenn Coppock of the USDA. The price of imported oil had risen alarmingly, and the government wanted to build a strategic

reserve of castor bean oil. (It had proven useful as a lubricant in jet engines, plastics, paints and explosives.)



Production line. Hopper Caster Bean Harvesters under construction

As a young engineer I was assigned to the project, and by the time the harvester went into use, I'd earned compliments on solving design problems. One of those challenges was quite memorable, and its solution didn't take place at Hoppers. On a Sunday I was at home when I got an idea about how to improve the machine's knockers. I went into my garage and built a wooden model. My young son was there, and when I wasn't looking, he turned the crank that rotated the disk. The knockers flipped out, clipped him on the forehead, and knocked him out flat. I knew right then that my idea would work on castor beans. My wife had other ideas.



Hopper welding and fabrication shop

A. H. Karpe was the long-time owner of Kern County Equipment Company across the street from the Wool Growers Restaurant on East 18<sup>th</sup> Street. Pat Banducci was shop foreman for Karpe. I was challenged by some of his special cotton picker maintenance tool requests. One of those was a "Cotton Doffer Grinder" that we made by converting a Montgomery Wards wood-working lathe.



Cotton Picker Doffer Grinder for A. H. Karpe Implement House was a modified Montgomery Ward wood lathe - DSCF0328

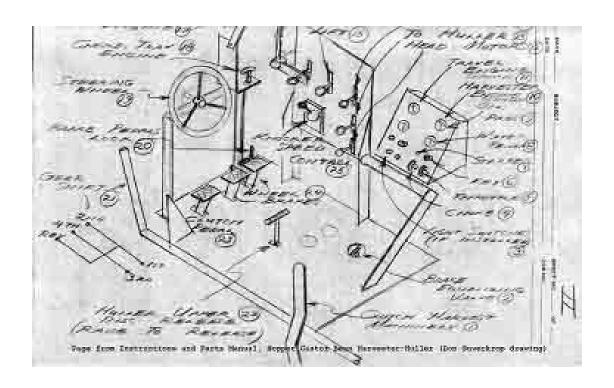
I knew A.H. Karpe only distantly, but I was told he could be difficult to deal with. When Karpe called Hoppers and requested a price on two castor bean harvesters, I knew I was facing a challenge. I went to our sales manager Dave Davidson for his advice, and I also stopped by the office of Hoppers' credit manager, John Yerry. How should I deal with Karpe? They both told me the same thing. His credit was good, but there was no way in the world he would actually order the harvesters.



Introduction of first successful caster bean harvester to Kern County Growers. Frank Hopper, Jr with white shirt and hand on hip immediately to left of Harvester at photo right. Abt 1958 -DSCF0195



Photo above: Ove Hansen, Hopper Machinist, driving Hopper castor bean harvester during trials near Shafter, CA.



My sketch of Caster Bean Harvester control station from Hopper parts manual

With the negative remarks and encouragement of Dave Davidson and John Yerry I drove south on Union Avenue realizing that a sale

to Karpe wasn't going to happen. I decided to try a "reverse approach." As I drove onto his ranch, I saw Karpe's Cadillac parked in front of his office shack. I pulled in behind it, got out of my '57 Ford, and instead of going in, I banged on the hood of the Ford: "Karpe! If you want these caster harvesters come out here and sign because I gotta get on down the road to the next customer!" The old man barreled out, nearly knocking the screen door off its hinges and asked, "Where do I sign?" I pointed, "Right here." In 15 seconds I was driving off his lot with an order that at today's prices was worth half a million dollars. Then I realized I felt repulsed by my own out-of-character brazenness. It had worked, but was that salesmanship? Or, was it the salesmanship that A.H. Karpe himself was famed for?



Hoppers plant on Espee St. was 10.5 acres and had 222,000 sq-ft of industrial and commercial space under roof. (Arrow: brewery building from 1905)

I left Hoppers in 1959 and went to work as an engineer for Jim Bonaventuri at his AFC fertilizer plant on Edison Highway. In 1960 I came back to Hoppers, and they decided I'd be their sales engineer.

In 1964 Hoppers machinist Bill Dean and I were working out the details of a rather strange pipe manifold contraption for producing inert gas at a processing plant in the Rosedale area. The owner of the operation was Duke Bloom, and he was obviously very interested in getting the gas unit on line.

He had been asking me questions, and it seems that I was not explaining things very well to him, or maybe he thought I was ignoring him. Right after I left, he phoned Frank Hopper, Jr. and supposedly warned, "I've got a .45 Colt in my desk, and if Suverkrop ever shows up here again I'll kill that SOB!"

As I drove into the Hoppers yard, Frank Hopper, Jr. was waving his arms at me, and he passed on the warning. I immediately swung the car around and drove back to resolve the problem. This time carefully and a bit more tactfully.



Hopper machine for paving runways at Lemoore Naval Air Station -DSCF0502

In about 1964 Bill Dean, machinist, was in charge of building a machine for paving runways at Lemoore Naval Air Station near Hanford. I dropped by to check on how the machine was doing and was confronted by the master mechanic for contractor D. Gerald Bing. The big man was covered with oil, and he was red with anger. Seeing the Hopper decal on the door of my car he assumed I was the local Hopper salesman, and he launched into a bitter tirade: "When you get back to Bakersfield I want you to kill the son-of-a-bitch who designed this g-d paver. Look what the bastard did. He didn't put a valve between the hydraulic tank and the filter, and I got hydraulic oil all over me!" I took a sympathetic tone, promised to pass on his comments to the designer, and I hurriedly sped off!



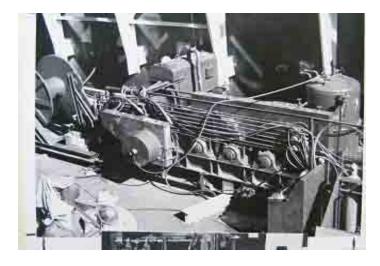
D. Gerald Bing, the customer I loved most! Behind him is a Hopper Highway Paving machine underway on Interstate 15 near Baker, CA -DSCF0503

Another job we did for D. Gerald Bing in 1964 was building a 26 foot-wide paving machine specifically for laying pavement at Oakland International Airport. It turned out to be a better at paving highways, and as a result Barney Frederickson called me up and asked me to go to Oakland and write an an order from Bob Callou.

Arriving at Oakland, I went into the estimating room of Frederickson & Watson and found Callou at his desk. He and about 20 others were busy working on a bid for the BART subway system. I had a lot of trouble getting his attention, but when he finally looked up, he snapped at me, "What do you want! What do you want?" I told him Barney Frederickson sent me in to review the

specifications for the paving machine they'd ordered. He quickly responded, "Where do I sign?" He scribbled his name on the contract, threw it back at me, and went back to working on his BART estimate.

I stood quietly in front of his desk with the contract in my hand. Finally, he looked up. "What do you want now!" I told him I needed a 25% down payment. He snatched the contract out of my hands, tore it into little bitty pieces, and threw them up in the air. They rained down around us like snow. "I don't pay 25% down for anything!" Keeping my cool, I told him I'd call my credit manager to see what Hoppers could work out and that I'd be back at 5:00. A short call to Hoppers fixed the problem, and I was back at Callou's office for the afternoon appointment. But the 5:00 PM appointment turned into 7:00 PM when Callou finally returned to his office. He was drunk. He'd lost the BART bid. I was so frustrated I went and got drunk myself.



Hopper-built, Nuclear bomb recovery winch being installed on a U.S. Navy ship

In 1966 the public didn't know that an errant U.S. Air Force bomber off Palomares, Spain had collided mid-air with a refueling tanker and dropped four nuclear bombs into the Mediterranean Sea. But nearby Russian submarines saw the whole incident, and they were eager to pick up the prizes.

The US Navy moved fast. Working through intermediaries, they urgently requested Hoppers to build a special winch that could handle a 13,000-foot line. Because of the need for secrecy, the Navy never came clean with us about why they were so desperate for a winch that had to be ready in 90 days. I designed the unit utilizing parts from the Hopper Hoist. Ove Hansen, Fred Jones, and Ray Harper supervised welders and job shop technicians in building it. It was ready in time, and I supervised its installation on a Naval ship at the Norfolk Virginia Naval Base. After that, I gave the job little thought. It was only much later I learned that the bomb recovery had been the largest peacetime salvage project in U.S. Navy history.

Another Navy project came to us in 1966 after a Russian submarine accidentally sank off Hawaii. This time the Navy was even more inventive. To hide the real purpose of recovering the submarine, the Navy used Hoppers to plant a story that we were working with Howard Hughes on a deep-sea craft to mine molybdenum nodules from the ocean floor. We were in the ruse, but we didn't

know it. The Navy never intended for us to build anything, and the Howard Hughes recovery ship, Global Explorer, was built elsewhere. It recovered portions of the Russian submarine, and Global Explorer was later used for oil exploration.

In 1967 Orel Prewett and I were on an offshore Santa Barbara platform measuring up a drilling rig for oil-tight chain guards. Glancing over to the next location, we saw an entire platform, some 400 feet of it, quickly slide off it's barge and sink into the ocean. Orel marveled at how neatly the operation was executed, and he remarked, "I guess they really know what they're doing." We went back to our tape measures. Later that afternoon when we returned to shore we heard on the car radio that there'd been a very expensive rig accident off Santa Barbara.



Hopper Citrus Tree Topper Attachment operating north of Santa Barbara near Refugio State Beach. -DSCF0336

Hoppers supplied parts to many customers who were also in the welding and machine shop business. Amongst some, this raised the perception that Hoppers sometimes competed with its own customers. Kimble & Son, builders of self-propelled tree-toppers, was a valued customer of the Hoppers Ventura Branch. When a small lemongrower near Refugio State Beach requested that Hoppers build a tree-topping attachment to fit his forklift truck, little did Suverkrop realize the hornets nest he was crawling into.

We designed and built the attachment, and it was successfully used. But a month or two later, Kimble's son-in-law came in, seated himself stiffly on the other side of my desk and demanded, "We are ordering you to cease and desist." Bewildered, I replied, "Cease and desist what?" Sensing a political problem over the tree-topper we'd built, I phoned Marv Winkler the Ventura Branch manager, and after I'd explained the complaint, he demanded, "Don you will cease and desist!" Down the hall I ran into Don Hopper, and he ordered, "Don you will cease and desist." I learned not to take business away from Kimble & Sons, and I learned how a dog feels running down the street with his tail between his legs.



Elevated Cement Conveyor at Monolith Cement Plant near Tehachapi, CA - DSCF0380 - DSCF0387

In 1974 at Monolith Cement I directed the careful unloading of a new Hoppers conveyor system so the pieces would be in proper order when the truck-crane picked them up. All the while a grungy character in dirty overalls shadowed me. After I was finally able to ditch him, I asked plant manager Steve Barker who that character was. "Oh," said Barker, "he's the company president." A very bad faux pas on my part.



Hopper 45-Ton Crane operating near Albany, NY DSCF0152



Hopper 45-Ton Cranes at Kaiser Aluminum and Chemical Corp, New Orleans, LA. Cranes also went to them at Spokane and Tacoma, WA and to locations in West VA. -DSCF0114

In 1974 I was delivering a new Hopper Crane to the Kaiser

Aluminum plant outside New Orleans. Hopper's instructor Bob Heath

and I were proudly snapping photographs to take back to

Bakersfield. From behind us, the plant manager interrupted with

the words "I'll take that film." Amazed, I handed it to the guy. I

also admired the manager for his pluck. Bob Heath was a big,

rugged man who had attained fame in the heavyweight boxing world.

One time, Bob and I were on a skyway at Dallas-Fort Worth Airport

when Mohammed Ali yelled out, "Hi Bob." The two chatted

momentarily and then we went our separate ways. Only then did I

realize what a celebrity I was traveling with.

Bob's official job with Hoppers was supervising the drivers of company trucks. Drunks coming from Vegas had the nasty habit of trying to wipe out the left sides of Hopper trucks that were heading the other way on Hwy 58. Pretty messy. Bob's job was sorting out the pieces.

On another job, we demonstrated a prototype, rubbish grinding machine at Bakersfield land fill for Bakersfield City officials and Roger Roy Land Clearing of Chatsworth, California. Shortly after that, Hoppers entered into a contract with Roger Roy to build an improved, giant, grinding machine.

The prototype had not work perfectly, but Roy glossed over its deficiencies, explaining that the problems would go away if we installed more power. I came into the picture when Frank Hopper Jr. ordered "Sell it!"

I had my doubts. While I was on the East Coast on other business, I visited the owner of the prototype near Boston,

Massachusetts. What I saw and learned told me the machine would not work. That evening I phoned Frank and reported, "We have a disaster." He told me that Hoppers was half-finished building the new grinding machine.

Hoppers had taken the order with a "no guarantee" disclaimer backed with a irrevocable domestic letter of credit payable through Bank of America, and it was a demand payment on completion. Roger Roy took delivery, and the machine failed to function as Roy expected.

In the ensuing lawsuit the judge's surprise instruction to the jury that warrantees must be in BOLD UPPER CASE LETTERS to be valid decimated Hopper's case. Fortunately, the Jury awarded Roy

only the price of the machine, or about \$250,000, which was not enough to bother Hoppers' final fortunes.

My problems in the field were not always the fault of machine design. In 1973 I was in Oakland taking an order from Kaiser Aluminum for four hydraulic level-luffing cranes, and this deal had the potential of being the largest order ever placed with Hoppers. Preparing myself for a six-month sales siege, I first told them that I didn't have the authority to offer Kaiser a discount. Whoops! Their engineering manager recognized the box I had placed myself in and suggested I call Bakersfield and "get a hold of somebody with a little authority." This I did, and by 2:00 PM the same day we had the order.



Hopper drill rig working near Wilshire Blvd, Los Angeles, CA - dscf042

The economy changed for the worse with the Carter administration and with the Iranian conflict in 1974 and with the

hostages, etc. Oil went up to \$93 a barrel. The local oilfields prospered and bloomed. Hoppers' was taking orders for well-servicing units 13 months out. It was good for Hoppers, but for me it made selling cranes next to impossible.



The death of Frank Hopper, Jr. in 1976, followed by the departure of key engineering staff, left the company without the innovative skills needed to address a changing market. During the 1981-1983 recession, OPEC again cut the price of oil, and the demand for oil-well servicing rigs vanished. Hoppers had a huge backlog of parts, and the financial burden of inventory was overwhelming. The Steel Service Center side of Hoppers also suffered. Don Hopper's personal and financial efforts to keep the company afloat were commendable, but in the end they were not enough to keep the company from filing Chapter 11 bankruptcy in 1992.

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