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Fred M. Keller: Doing Things His Way

Gordon L. Olson

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FRED M. KELLER

Doing Things His Way

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ACKNOWLEDGMENTS

I have had the good fortune to interview Fred M. and Bernedine Keller on several occasions, gathering details of their life together, his experience and attitudes about business and industry, as well as their philanthropic work through the Keller Foundation.

Background information for the Fred Keller story also came from a 1987 manuscript by William Houseman, who visited with the Keller family and business associates at the request of their son, Fred P. Keller. In addition, Bernedine Keller and her brother, Arden Johnson, each produced written accounts offering additional reminiscences of Fred's life and accomplishments. Further background information was gathered from news accounts and industry studies of the period, and in the books, periodicals, manuscripts and photographs of the Local History Department of the Grand Rapids Public Library.

I was greatly aided in producing this biography by my colleague and friend G.F. Korreck, and by Ellen Arlinsky, who edited the final draft and excised the demons of grammar and construction that regularly haunt my writing. Dan Murdock designed the book, and it was printed by The Printery of Holland, Michigan. To each of these contributors, I say, "Thank you" for your effort. For errors that escaped their scrutiny, I accept full responsibility.

Gordon L. Olson

Grand Rapids, Michigan 2000

A MAN IN MOTION

"In this country there is no standing still. You must try new things and try harder."

Fred M. Keller

Well beyond the age when most of his peers were spending their retirement years golfing or fishing, Fred Keller was still trying harder. An entrepreneur since elementary school, he remained actively involved in his most recent business—Paragon Die and Engineering Company. And he was making it work by adhering to a few basic, yet profound, principles: sound thinking, practical application, fairness, an abiding faith in the human spirit.

From his earliest days, Fred Keller has been interested in how things work. And once he grasps a basic operating concept, he applies it with purpose and confidence. Keller's desire and his ability "to reason things out" have earned him a reputation as both an innovator and a troubleshooter, a rare combination. As an innovator, he has refined the science of applying breaking technology. Adept at assessing the long-term potential of new ideas, he is equally skilled at aligning himself with the people who can help make the technology work to profitable advantage. As a troubleshooter, he cuts quickly to the chase to analyze a problem and come up with a positive solution that works for all parties involved. It is said Keller will accept any mistake, from himself or his employees...once. In fact, a mistake is acknowledged only if it is repeated.

For nearly all of his life, Fred Keller has been a man in motion. In any given year, he may have held down two or three jobs, been involved in a number of sidelines as well, and devoted many hours to church, youth, and civic groups. It seems that no moment of his life has been unwisely spent. It would be easy to typecast Fred Keller as the typical self-made man, but that would be missing a great deal of the story; for Keller did not so much as invent, or even reinvent, himself, as he did the world around him. And he did it, as always, his way.



Fred M. Keller

*(Photograph by
William C.
Minarich
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Naples, Florida)*

A SOLID FOUNDATION

"If you don't pay your board, your plate goes to the ceiling."

Fred Myers Keller was born in Muskegon, Michigan, on March 17, 1910, to Paul and Florence "Flossie" Keller. Fred was the only child, and he received considerable attention from his doting parents and grandparents. Legend has it, supported by his mother's often-repeated recollection, that young Fred's first word was "Chronicle!"—shouted, she said, with the same enthusiasm as the newsboys did on the streets of Muskegon.

The Muskegon of Keller's early boyhood was a struggling town. When the lumber industry was at its peak in the late 19th century, the city was regarded as a jewel of the Midwest. By Keller's day, however, the jewel had lost some of its luster. Fortunes and companies had been swallowed up when the forests were depleted, and the community was struggling to rebuild itself.

In 1906, the Brunswick Company, already a well-established manufacturer of billiard and bowling equipment and ornate saloon fixtures, opened a factory in Muskegon. Among the plant's approximately 100 employees was Paul Keller, a woodcarver by trade. "He was a master carver," Fred remembers. "He used to make a swagger stick for each president who came into office. He did a lot of inlay work. I used to have some lamps of his with inlay work, and cribbage boards with mother-of-pearl." Intensely proud that he'd been selected to make the first custom pool cue Brunswick produced at its new plant, Paul impressed upon his son the importance of being the first to do the next good thing. Even as a young man, Fred agreed with the idea and embraced it as a belief he would carry the rest of his life.

As a child, Fred did not shy from the hard work his family expected of him. He helped his parents with household chores and home construction projects and with making the paper flowers that were later sold at the market to supplement the family income. He can still remember his father saying, "If you don't pay your board, your plate goes to the ceiling."

Fred was especially close to his paternal grandparents, Fred and Ottillia, who, with their son, Paul, had come to the United States in the early 1880s and lived on a small farm on White Lake in Montague, a few miles north of Muskegon. Fred spent summers there and remembers them as good times. Grandfather Fred had been a wagon maker in Germany and when times were hard in his new country, he worked in a neighbor's blacksmith shop. With its arcane tools and his grandfather's ability to transform raw metal into finished products, the shop held particular interest for young Fred. It was here he learned to grind drills and fashion metal implements—essential elements of the tool and die-making trade that would become his lifelong passion.

When he wasn't in the shop or enjoying the rich, tasty dishes his grandmother cooked, he laid bricks for his Uncle Oscar and delivered tin pails of milk from his grandparents' Jersey cows to the neighbors. "I loved milk, so I'd take a sip from the pail before I delivered it," he recalls. "One day I sipped too much and told my grandmother she shortchanged the customer."

Deeply imbued with the family work ethic, Fred, considered big for his age, got his first paying job in the fourth grade. He washed bottles after school at Carlson Brothers



Fred Myers Keller was the only son of Paul and Florence Keller, shown here outside their Muskegon, Michigan, home. (All photographs are from Fred M. Keller unless otherwise noted.)

Creamery near the docks on Third Street, earning seven cents an hour. On Saturdays, he packaged bulk foods at a grocery store. But before long, he was ready for a new challenge. The creamery wage was fixed, the duties were repetitive, and the 10-year-old was restless. As young as he was, he wanted to run his own business, make his own decisions, and go as far as he could go. The newspaper, the same *Chronicle* that caught his eye and ear as a toddler, offered that opportunity. As a home delivery boy, he could take on as many customers, and as much profit, as he could manage.

Flossie Keller at first protested her young son's desire to enter the newspaper delivery business. She was already bothered that he often came home late from the creamery and believed delivering papers would keep him out even longer. Paul interceded, reminding his wife that Fred was doing all right at school and that he was big, strong, and healthy. Flossie relented, but never stopped worrying.

Fred was the youngest of the newsies, as the delivery boys were known then, and relished the experience. To ensure quick paper pickup and delivery, the boys' supervisor gave each one a pair of streetcar tokens at the beginning of the workday. The group rode down to the plant to pick up their papers, then out to their various routes. While Fred enjoyed the streetcar ride as a time to watch people and lose himself in thoughts about what his future might hold, the older boys were more concerned with the length of the trip and complained that it wasted their time.

Fred reasoned out the dilemma and offered a solution. In return for their tokens, he would pick up all the papers and deliver them to the street corners. It was a perfect deal—everyone got something and the papers would be delivered on time. The other newsies agreed. Flush with streetcar tokens and a growing list of subscribers, Fred was beginning to feel pretty good about his first true business venture. He was also refining his own sense of customer service. He was intolerant of newsies who weren't on their corners, waiting, when he came by, particularly if it was raining.

After three weeks and a pocketful of tokens, Fred was called to the route supervisor's office, complimented on his ingenuity, and then told he was being put out of business. Fred could keep his route, but the delivery idea so intrigued his supervisor that he decided the *Chronicle* could use trucks to make the drops. No more free tokens. Taken aback for only a moment, Fred reminded him whose idea it was to consolidate deliveries. The



Barely older than the boys he recruited, Fred Keller, bottom center, organized a Boy Scout troop in Muskegon following his graduation from Fort Wayne Divinity School.

older man jokingly asked if Fred were looking for royalties. Fred settled on a second route. This, too, became a Keller trademark. He has always been as interested in finding new opportunities as he was in capitalizing on what he had already accomplished.

A HANDS-ON EDUCATION

"I have to be able to reason something out."

In between his many jobs and budding business career, Fred just barely had time for school. He attended a number of schools as he moved up through the elementary grades, and was particular about the merits of education. He liked science, but hated English. "I have to be able to reason something out," he explains, "and I couldn't reason that subject. Everything had a rule, but there were always exceptions. I couldn't buy that."

This ability to "reason out" things is a trait Keller has carried throughout his life. It would serve him well in business, in his relationships, and in the many community projects to which he lent his time and income. But most of all, his desire to know how everything worked kept him busy.

By the time he had completed seventh grade, Fred had a milk route, using a wagon pulled by his horse, Mary. The job required rising at midnight to complete deliveries by morning. He also started driving the family automobile—there were no age restrictions then—and learned enough about a car's inner workings to acquire a loyal following as a mechanic. The Keller backyard was often filled with vehicles awaiting Fred's magic touch.

By the age of 13, Keller found a school he liked. The Hackley Manual Training School, where he spent the eighth through tenth grades, gave him the hands-on training he wanted. He took mechanical drawing, calculus, machining, and tool and die making, as well as automotive repair. He was so adept as a mechanic he was given the responsibility of installing the school's new bell system. The manual training program ended after tenth grade and Keller, at age 16, decided he'd had enough classroom education for the time being. Apart from a night course in bookkeeping and typing, the outside world was now his classroom.

After leaving school, Fred graduated to full-time employment at the dairy. Shortly thereafter, Sears, Roebuck and Company opened a store in Muskegon. Fred remembers talking with his parents about the new store in town. His family had always admired the company and thought he should apply for work there. "Anyone can be a milkman," his father told him. "But very few can be a good sales clerk at Sears, Roebuck."

Fred listened, then walked away from his \$40 per week milk route for a \$20 sales job at Sears. His star rose quickly. Within three months he was promoted to the radio department, largely because word of his mechanical aptitude had gotten around. Fred later



Bible in hand and about to leave for his Sunday sermon, Keller paused for this photograph in front of his Cedarville cabin in 1931.

served as an adjuster for the company and often made calls to handle claims. Most dealt with car tires and batteries. On one occasion, however, a woman brought back a corset, and Fred was concerned that she might put it on to demonstrate the problem for him. For perhaps one of the few times in his life, he didn't have a plan of action.

Typical of most young men, Fred was eager to make an impression. At the age of 18, he purchased a red Ford roadster with a rumble seat. It was one of the few early indulgences he allowed himself for his hard work. The car served him well on the occasions that he drove General Robert Wood, then the regional manager of Sears and soon to become its president, to the various store sites that the company was opening around the state. Impressed with his young driver, Wood invited Fred to work at the growing company's Chicago headquarters. But the idea didn't appeal to Keller. He was still repairing cars and bikes on the side and wanted to continue working with machines.

After a couple of years, Keller left Sears for a better opportunity as a Maytag sales and repairman for the company's line of gasoline-driven washing machines. The new machines were great labor-saving devices that were especially valued by farm wives who faced a steady stream of dirty laundry. Keller remembers selling his first Maytag washer to a celery farmer.

It was around this time that Keller met a young woman named Bernedine Johnson at a church summer camp. He was taken with her, but when he pressed for a date, Bernedine turned him down. He was four years older than she was and, in her eyes, a stranger. Not even the red Ford roadster could turn her head.

Fred, meanwhile, was beginning to rethink the course his life was currently taking. One of the influential figures of his youth was Deacon "Deke" Bennett, who was affiliated with the Swedish Evangelical Church and took an interest in Keller and his friends. Bennett was a calming influence who brought a sense of balance to young boys' lives. "He was quite religious, and I had to go to church to play on his basketball team," Keller recalls. Bennett seems to have struck a deeper cord with young Fred, one that heightened his already active Christian sensibilities. After some thought, he sold his beloved roadster and used the money to finance his education at Fort Wayne Bible College.

Life was not easy for the young divinity student. Without a car, he had to hitch rides wherever he went. And the money from the sale of the car by no means covered all of his books and tuition. To make ends meet, he did kitchen work, babysitting, wallpaper hanging, cake decorating, and any other odd job that would pay.

Between coursework, odd jobs, and occasional trips home, Keller's divinity school sojourn passed quickly. Following completion of the year-long course of study in 1930, he decided against traveling to India as a missionary and opted, instead, to return to Muskegon and pursue a mission of a different sort. He and a friend, Harold Young, started a Sunday school on Henry Street and joined a group called the Gospel Messengers. Fred, like his mentor, Deke Bennett, also formed a Boy Scout troop to which he devoted



Keller's home during his first winter as a minister in the small Upper Michigan community of Cedarville was this log cabin he built for himself.

many hours of his time. The group fished, hunted, and camped together as Keller helped them through their transition from boys to young men.

To sustain himself and his missionary activities, Keller opened an ice cream store. When competitors began popping up, he started making his own ice cream in a building he rented on Laketon Avenue. His main career pursuit, however, was mechanical engineering. He had loved the work from his first exposure at Hackley Manual Training

School. Although the Great Depression had wreaked havoc with the Muskegon economy just as it did the rest of the nation, Keller managed to land a job as an apprentice tool and die maker with Shaw-Walker, a Muskegon-based manufacturer of metal file cabinets, and other office furniture and supplies. "The foreman of the tool room was active in the church, so he gave me a job," he explains. "You always have to have little connections."

No connection could change what was happening in the country, however, and when Shaw-Walker's financial picture clouded, wholesale layoffs were made. One of those who lost his job was a young apprentice named Fred Keller.



One of Keller's neighbors in Cedarville was "Dave the Hermit," an eccentric figure who provided many interesting and unusual moments.

concurrency, reopened the boarded-up church and began holding services. Making ends meet through a series of odd jobs, he skidded logs, installed septic tanks, and put up ice on nearby Mackinac Island, which was still without modern refrigeration. He also ran a muskrat trap line, selling the pelts, and caught fish through the ice, mostly trout, to sell. And, of course, he found time to continue his interest in the workings of mechanical equipment, fixing boats and motors in his spare hours.

Keller spent a long winter alone in Cedarville, living in a small cabin, still standing today, that he constructed himself of heavy timber and stone. His neighbor, and fellow trapper, a man known throughout the community as "Dave the Hermit," had lived in the area as long as anyone could remember and was notorious for his unusual, spartan

A MISSION DEFINED

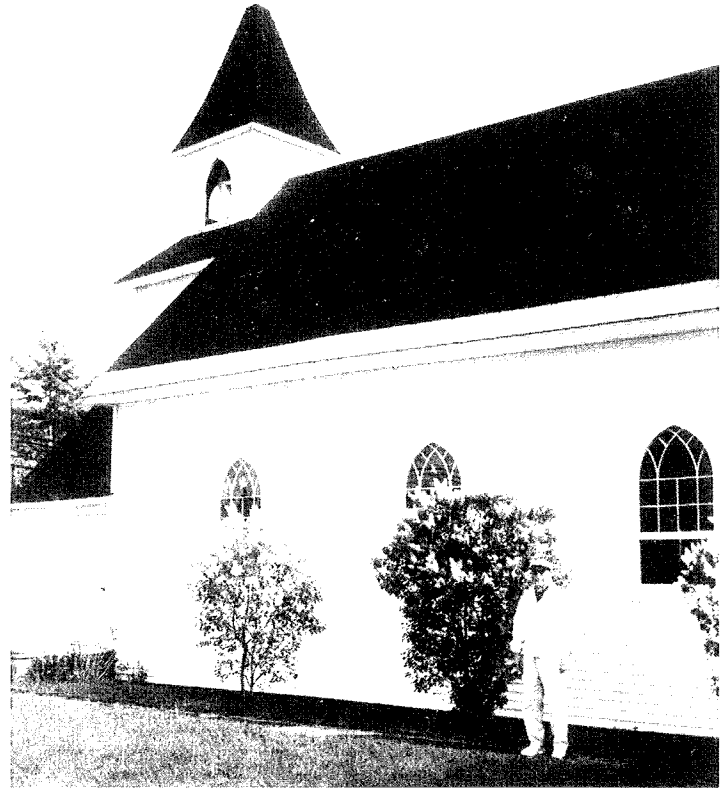
"...that's the man that changed my life."

Viewing the setback of his job loss as a further opportunity, Fred was quick to respond. The Swedish Mission Evangelical Church organization that he belonged to asked him to visit struggling churches in Traverse City and Cedarville, Michigan to determine if they should be closed.

After a brief stop in Traverse City, Keller drove on to Cedarville, a community on the eastern tip of Michigan's upper peninsula so small it was often not included on state maps of the era. Arriving in the fall of 1931 in his Ford Model T with \$50 in his pocket and a set of traps, he found a small, devout group of worshippers, and with the church's con-

lifestyle. Fred passed Dave's cabin when he tended his traplines and recalls several examples of his eccentric behaviour. Community members often supplied Dave with food, and on one occasion, visitors found him in bed along with a bundle of potatoes and other vegetables. Asked to explain, Dave said it was so cold that taking the vegetables to bed was the only way to keep them from freezing. Another time, Fred and a friend heard shots coming from inside Dave's cabin as they approached. After making sure he was not shooting at them, they entered the cabin and discovered him shooting at rats that were running across his table! Nearly 60 years later, Fred still breaks into a wide smile as he begins one of his "Dave stories." They are a vivid part of his Cedarville memories.

As winter slowly released its icy grip on the small community and gave way to spring, Fred was asked by townspeople to close the country church and move to a larger church in downtown Cedarville that had closed when the previous minister departed. A Muskegon



friend, Ralph Witmer, had since joined Keller in the little town, and the two worked together serving the congregation. They also played together, most notably for a basketball team known as the Pickford Orioles.

Continually busy, and having attracted a loyal following, Keller began to believe that the ministry was his true purpose in life. He would soon feel otherwise. Early in 1932, Keller had an experience that caused him to rethink his vocation. "I found out that I wasn't cut out for a minister because I had to bury a young man who had become a close friend and it got to me," he remembers. "It was winter...and it was cold and the ground was hard. I went back there a short while ago because I wanted to get a picture of the tombstone...that's the man that changed my life."

The Cedarville church resurrected by Fred Keller in 1931 remains an active congregation. Here, Keller poses with the building in the background during his 1993 visit to the community.

On a return trip to Cedarville more than 50 years later, Fred and Bernedine Keller were surprised that, the cabin he built was still standing and had been moved to the grounds of the local historical society.

THE APPRENTICESHIP OF A MASTER MECHANIC

"I was always learning."

When the national economy improved slightly in 1932, Shaw-Walker secured some new office furniture contracts, and in the fall, Keller was called back to work. He left Cedarville, but his friend Ralph Witmer stayed on. The community continued to be served, and today the church Fred and Ralph reopened is thriving.

Back at Shaw-Walker, Keller was given free rein to put his mechanical knowledge to work, and he made good use of the opportunity. The company's chief engineer gave Fred the latitude to work on new products and build homemade samples. He was finally developing, and applying, the mechanical aptitude he had only practiced at Sears, Roebuck and Maytag. He was becoming a master mechanic.

The work at Shaw-Walker was demanding. The company had only a slim profit margin and could afford little risk on new, innovative products. While this may have inhibited creativity, particularly for a young tool and die maker, it also helped him develop a sense of what was absolutely necessary to make a design work. He was instrumental in the design of numerous products, including a metal roll-top desk for banks and a machine to produce office file folders.

"I was always learning," he says. "I've always felt that nothing was impossible. I also believe there's nothing new under the sun—it's just the application in a particular field that may be new. But everything's there; it's just a matter of applying a particular principle in a different way."

As was his way, he extended his 50-hour work week by returning to the plant on Saturday mornings to maintain one of the company's two power-generating diesel engines. It seemed, for once, that Keller was finally on a definite career track.

When Shaw-Walker's chief engineer died in 1935, Keller was certain the job would be his. The company thought otherwise. "They wanted a man with a college education," he remembers. "So they hired a kid I went to grade school with and made him chief engineer. And so I said, 'Well, I want to go out on my own.'"

Keller had already been offered a job by the Brickner-Kropf tool and die shop and didn't think twice about leaving. Shaw-Walker management had second thoughts, however, and not long after Keller left, they realized his value. They asked him to return, but the trust had been broken and Keller said no. Brickner-Kropf was now his home.

Keller was as enterprising at Brickner-Kropf as he had been everywhere else in his life. The company operated on an incentive system and Keller thrived within it. "We had to bid on our jobs," he explained. "If we bid a hundred hours and did the work in eighty hours, we got twenty hours of extra pay."

All went well until early 1936, when a strike called by the International Association of Machinists hit all the Muskegon shops that employed tool and die makers. Fred was not yet a union member, although he would be admitted later that year, but it didn't matter. Every tool and die maker was affected. Fred was in a group of about 40 Brickner-Kropf tool and die makers (the company employed 90) who didn't want to walk out. "They went on strike for a nickel an hour, but I could make more money on my incentive job, so I thought it was wrong," Keller said. "I refused to picket. I had to pay for a picket." The experience helped him affirm an idea he carried with him to the companies he later bought or founded—good work would be acknowledged and rewarded by a good employer.

Faced with uncertainty about getting work delivered on time, a number of Brickner-Kropf customers transferred their orders to the competing Hart & Cooley company in Holland. Keller continued working at Brickner-Kropf, and also supervised the completion of jobs at the Holland plant. The work got done, but the strike dragged on. Not allowed to take on additional jobs, and not wanting to sit around, Keller began looking again for other work. He went to a federal employment agency headed by a man he had trained at Sears, Roebuck, and learned of an opening as foreman of the Florence Stove Company in Kankakee, Illinois. Keller was interviewed and offered the job. But he never made it to Kankakee.

A FORTUITOUS CUP OF COFFEE

"I had to set all that up and then train the people to make the products."

Keller left for Illinois on an icy New Year's Day 1937 and stopped into a Holland café for a bite to eat. While sipping his coffee, he was approached by a café regular named Basil Crampton, the owner of the Crampton Manufacturing Company. Remembering Fred as one of Brickner-Kropf's tool-makers, he said, "I need a man to run my tool room. I'm starting a company over here." Keller, not eager to leave Michigan, took the job with a simple "O.K." He would finally get the chance to run his own operation.

The company made a variety of small products, such as refrigerator hardware and plumbing fixtures, and was also looking to get into zinc die-casting, the business of making parts for various manufacturers by forcing molten zinc into steel die forms. Although the economy was still slow, the technology held promise and Crampton wanted to see if it was worth the investment. Calling upon Fred's troubleshooting abilities, his employer sent him to Grand Rapids to evaluate a zinc die-casting company he was considering buying. The purchase went forward, but before Fred could address problems he felt hindered the company's efficiency, the plant burned to the ground. "We moved all of that burned equipment over to our place and built our own die-casting operation," Keller said.

Under Keller's watchful eye and thanks to his enterprising business sense, Crampton prospered. Keller pushed for change and improvement at every turn. He converted machine drives from lineshafts to individual motor drives, a bold and expensive move. Even during the depression, the plant regularly added equipment, and Fred foresaw that



After initially turning down his request for a date, Bernedine Johnson agreed to go out with Fred. After a lengthy courtship, the couple were married in Muskegon on April 29, 1939.

having individual power sources for each machine was the most efficient way to expand. He also had the tool room take on contract work making plastic discs, an indication of his early interest in what was then a relatively unused material.

Keller was also known to press on with projects with or without management involvement. When Crampton management resisted his suggestion that the company do its own chrome plating instead of jobbing it out, he convinced the company to join him in a joint venture with the city of Douglas, Michigan. The Douglas Plating Company's land and building would be financed by a city contribution based on a percentage of the payroll of new employees. The city supported the deal because it created new jobs and added another company to the local tax base. Crampton officials were happy because they secured plated parts from Douglas Plating for lower prices than they had been paying to other suppliers.

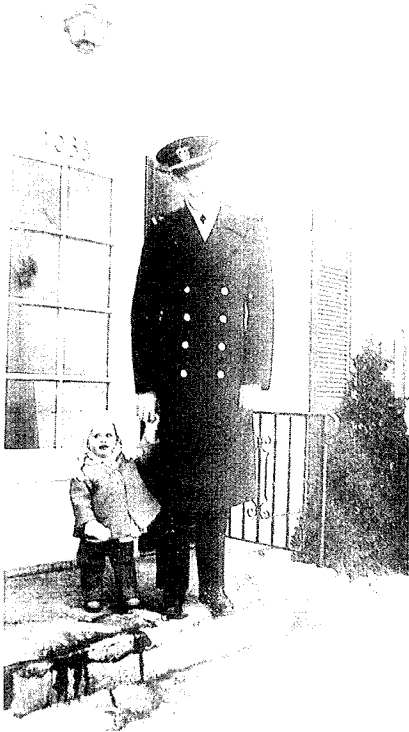
Keller's personal fortunes blossomed along with his career in the 1930s. Following Bernedine Johnson's graduation from high school, a friend talked her into a blind date with a country preacher who needed a piano player for one of his services. The preacher turned out to be Fred Keller. The impression was more favorable this time than it had been when she turned down his first request for a date, and the couple began a long, on-again-off-again courtship.

Unlike his older sister, Arden Johnson was impressed with Keller right away. Arden remembers him driving up to their house in his Model T, armed with treats such as redskin peanuts and white fudge, and a remarkable ability to fix almost anything. When the family needed additional electrical outlets, Fred handled the wiring. When the strings broke on Arden's cherished tennis racquet, and he didn't have the money for repairs, Fred took the racquet home and brought it back, restringing, the next day.

Bernedine's father was somewhat less enamored. To the elder Johnson, it seemed this brash young man spent money too easily. And when Keller started trading his cars every year, getting top dollar for the trade-in, Johnson mused that "Fred will never have a dime." Nevertheless, in May of 1939, after a nine-year courtship, he and Bernedine were married in Detroit. The couple returned to West Michigan and moved into a one-story home in Holland. Arden Johnson lived with them during the summer while in between classes at the University of Michigan and, after graduating with an engineering degree the following May, returned to work for his new brother-in-law. In 1940, Keller had patented a single-action flush lever for toilets that became an industry standard. Johnson

made the drawings for the first model of the lever, which was given the number 1940 in honor of the year of its invention. The following year, just as the Kellers brought their newborn daughter, Kathleen, whom they have always called Kathy, home from the hospital, Japanese bombs destroyed the American naval base at Pearl Harbor, and the United States entered World War II. Arden Johnson enlisted in the Navy, and Keller's career took a major turn.

The Douglas Plating Company was making a good profit, a fact that didn't go unnoticed by Crampton executives. Perhaps it was mere business hindsight—they had balked at Keller's proposal to develop their own plating operation a few years earlier—or they may have had a desire to get a bigger cut of the operation co-owned with one of their



Home on leave from the Navy in late 1942, Bernie's brother, Arden, poses with Kathy.

employees. In any case, there was disagreement over who would have final say in how Douglas Plating was run.

"Crampton decided they would buy me out," Keller recalled. "I said O.K., but any profit I made is mine. I will sell the equipment back to you for what I paid for it. Then, any money that's been made, any money that I've put into Douglas, I've got coming back. They agreed. We signed the papers, and everything was all right. About 60 or 90 days later the government came along and said 'no more chrome plating.' They [Crampton] accused me of knowing that was going to happen...and that's why I sold. But one of the purchasers happened to be the head of the War Production Board in Grand Rapids. If anybody should have known what was going on, he should have."

Nonetheless, a disgruntled group of Crampton stockholders conspired to cut Keller out of the stock options that had been part of his employment agreement. In typical Keller fashion, he walked away from the situation and set up his own consulting business advising tool and die companies on matters of production efficiency and marketing. Among his clients was the Jervis Corporation, originally co-founded as Crampton and Winters by Basil Crampton and renamed during the war for owner R.E. Jervis. The older Jervis was a man much like Keller and one whom Keller came to greatly admire. When he offered Keller a full-time job, Fred accepted, but with the stipulation that he could start his own company when the war ended.

It was during this time that Fred earned the title of master mechanic with the Jervis Corporation and began using it on his business letters. It seemed to fit, although it didn't encompass the range and volume of work with which he was now involved. The Jervis Corporation had become a major wartime contractor, and Fred was in charge of the design and development of screw machine parts to make .40 millimeter projectiles. The company later got a contract to produce landing gear for the U.S. Navy. "We made them for the AT-17 training plane, all F4s, F6s, the Vought-Sikorsky plane with the swept-back wing, the C-46s, 47s, and the DC-3s," Fred recalls. "I had to set all that up and then train the people to make the products." The company also had contracts from Emerson Electric to build radios for military installations, and from Pratt Whitney to produce aircraft engine baffles.

The work was detailed and intense, but like most young men of the time, Fred felt an obligation to do more. His intention was to enlist and join the U.S. fighting forces overseas. But his local draft board turned down his enlistment request, maintaining that his work made him more valuable stateside.

In 1942, Keller's first full year as a master mechanic, he earned \$4,500, and Jervis rewarded him with a hefty bonus of \$5,000. He was beginning to profit in other ways as well. His relationship with Jervis was especially satisfying. "He was one of the most outstanding guys I ever met," Fred says. "I felt very kindred to him because he had only a third-grade education. He always had a lot of ideas. He always challenged me. One day he said, 'Fred, you've got the most beautiful lab out there, and those chemists are not that busy.' You've got to remember this was during the war. 'Sometime down the line, plastics are going to be a big thing. We've got to learn how to plate plastics.'" Keller and his chief chemist began experimenting. Their initial trials were successful, and an idea was planted that would take root several years later.



Six-year-old Kathleen (Kathy) Keller and her four-year-old brother Fred posed on the steps of the family home in 1948.

OWNERSHIP HAS ITS REWARDS

"If anything had happened, I wouldn't have been able to reach up and touch bottom."

Although well respected and well treated at the Jervis Corporation, Keller still wanted to run his own tool and die business. With the birth of their second child, Fred P., in 1944 as the war was drawing to a close, Fred and Bernie believed their growing family's best prospects—and Fred's greatest happiness—would come if he had his own company. Both firmly believed the time was right and that Fred had the skills to make such a venture a success. With Bernie's encouragement, Fred reminded R.E. Jervis of their earlier conversation.

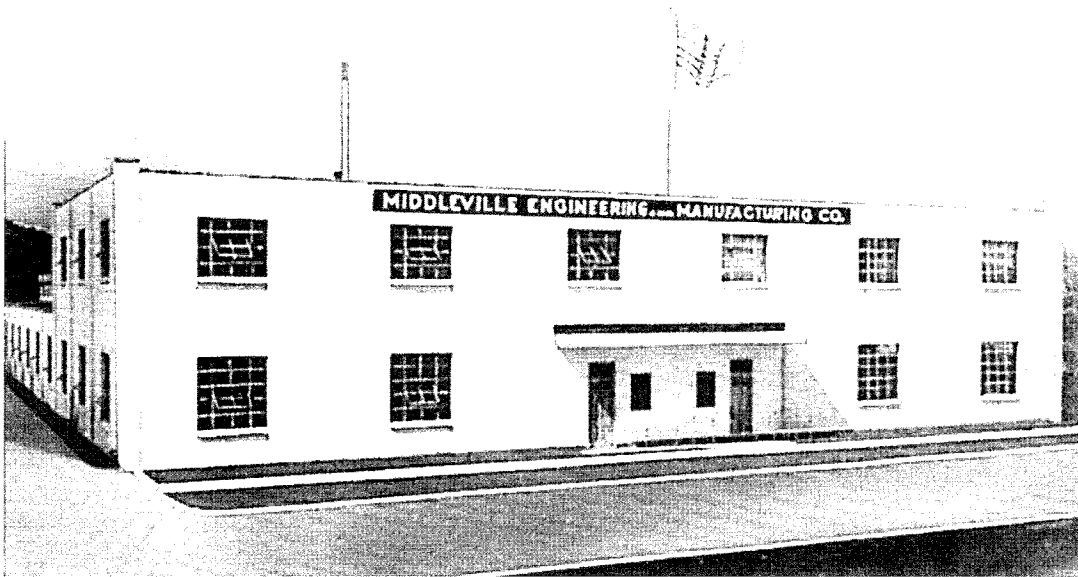
Following Germany's surrender on May 8, 1945, Jervis made good on his promise. He was willing to release Keller from his employment agreement, but suggested a partner-

ship. Keller hesitated. Even though he respected and trusted Jervis, he was eager to run his own business on his own terms. Keller finally responded that the partnership would have to ensure him 50 percent ownership. Jervis offered him 51 percent, and the pair were in business.

Keller

chose Middleville, about 20 miles southeast of Grand Rapids, one of the few places that had a manpower surplus, for his enterprise, and found a vacant building with enough space to accommodate his new Middleville Engineering-Manufacturing Company. Even though the war was winding down, machinery was still difficult to come by. So Keller bought out an aircraft company in Rockford, Illinois, and a small manufacturing company in Detroit. He used the equipment from the sale to establish a zinc die-casting operation that soon found eager customers in the automotive and appliance industries that were enjoying a resurgence in the aftermath of World War II.

With his zinc business off and running, Keller had his eye on producing aluminum and magnesium die-cast products. While zinc die-casting employs a piston-like device that forces the molten zinc into the mold, aluminum and magnesium, which melt at a hotter temperature, had to be hand-ladled into molds. The process required different machinery, and so a second enterprise, the Kaljer Company, was born, its name taken from the names of the three principals: Keller, Al Ruhl (Jervis's son-in-law), and Jervis. Among the new venture's financiers was a Grand Rapids businessman known for his closeness with a dollar. Preferring not to identify him by name, Keller recalls, "He was



Middleville Engineering and Manufacturing Company, started by Fred Keller at the conclusion of World War II, boasted 40,000 square feet of manufacturing and shipping space on its first floor, and an additional 15,000 square feet of second-floor office space.

one of the tightest men in Grand Rapids, I borrowed money from him and I had to endorse all my stock over to him. If anything had happened, I wouldn't have been able to reach up and touch bottom."

But Keller was more than ready to meet the challenge. By this time, he had secured a number of patents. Middleville produced his toilet flush tank lever design in quantities of 1,800 per day. The company also developed a remote-control three-wire automotive mirror that is still used today, and a seat belt cam lock design that operated through metal-to-metal contact. Although it eventually came into general use, the latter device was initially ignored because few people wanted the new devices and the auto companies were slow to make them standard equipment. Middleville later developed new air ride system components that became standard on heavy-duty trucks.

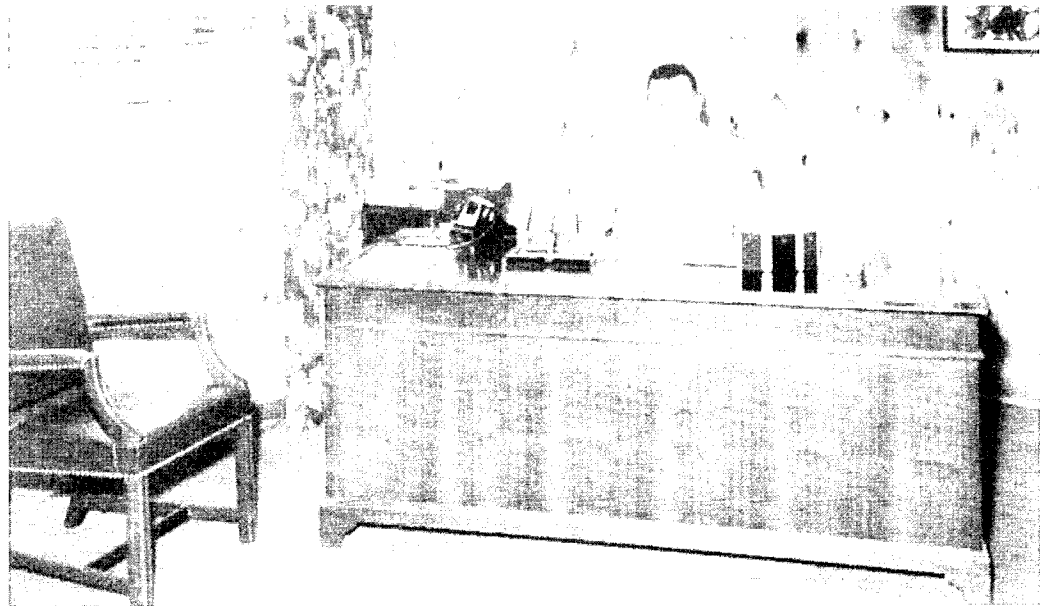
Another Middleville innovation was a simple, magnetic lock device for refrigerator doors. The mechanism required the purchase of magnets and rubber gaskets—Middleville did only the assembly—and Keller wondered whether there would be a better way to profit from the design. Middleville sold the locks for 19 cents each, but Keller reasoned the company could make more money by leasing the concept to either a magnet or a rubber manufacturer. He found a

buyer in B.F. Goodrich whose royalty payment to Middleville of 2 cents per lock, slightly exceeded the 1.9 cent-profit the company had been earning.

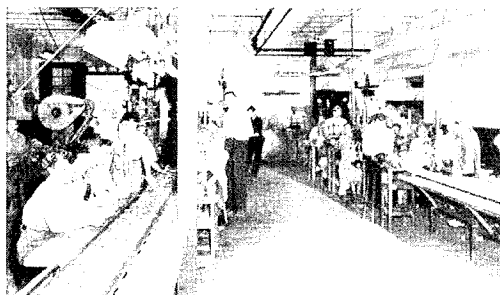
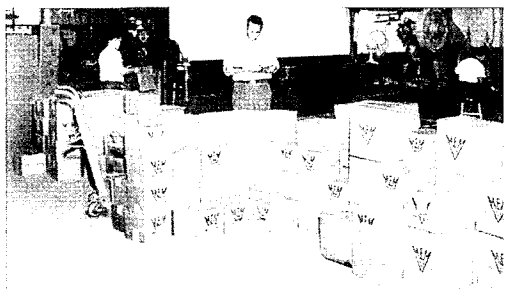
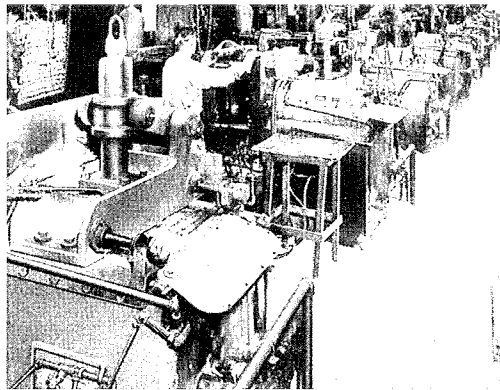
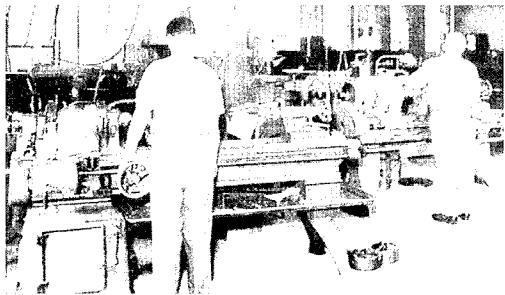
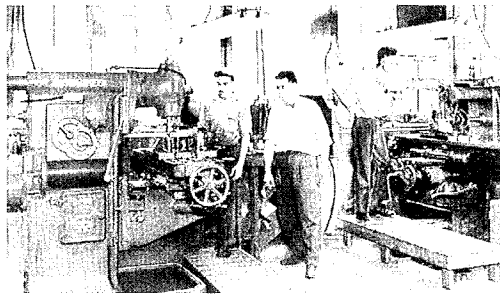
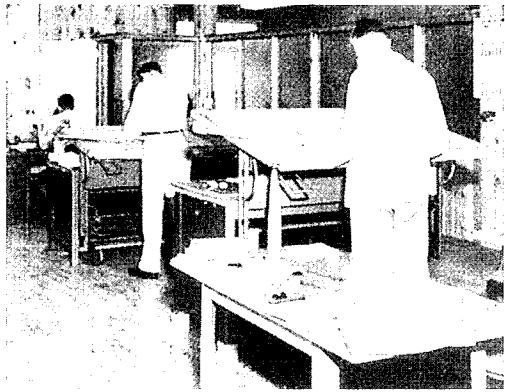
The arrangement yielded \$250,000 in royalties the first year, but Jervis was unhappy. He believed Keller had sold the idea too cheaply and that Middleville wouldn't be able to compete with Goodrich. That was the idea, Keller explained. Middleville wouldn't have to do anything, and would still earn more than it had by making the product itself. Once again, Fred had been looking further ahead, and his mentor finally saw the light.

In addition to product innovations, Keller introduced new material-handling and -processing technology to Middleville. He brought in conveyor systems to improve assembly line flow. This reduced work-in-process inventory and improved quality. Anticipating that zinc die-casting would be phased out, long before it happened, he began exploring other materials and set up his own plating plant to ensure greater control over quality and costs.

Keller's grasp of costs and financing served him well throughout his career, a credit to the bookkeeping course he took in night school and his own application of its principles.



Seated comfortably behind his president's desk at Middleville Engineering and Manufacturing, Fred Keller was, for the first time, master of his own operation.



Walter Behnke, who was Fred's banker during his Middleville Engineering and Manufacturing Company days, says Keller always displayed "a fine understanding of finances. He always knew when he borrowed money how he would pay it back."

Keller also had a sense of what risk taking was really about. "One of the things that always impressed me about Fred is that he knew his costs," Behnke said. "This is one of the weaknesses of 50 to 60 percent of the businesses today. They will go out and take a bid on a certain item, and

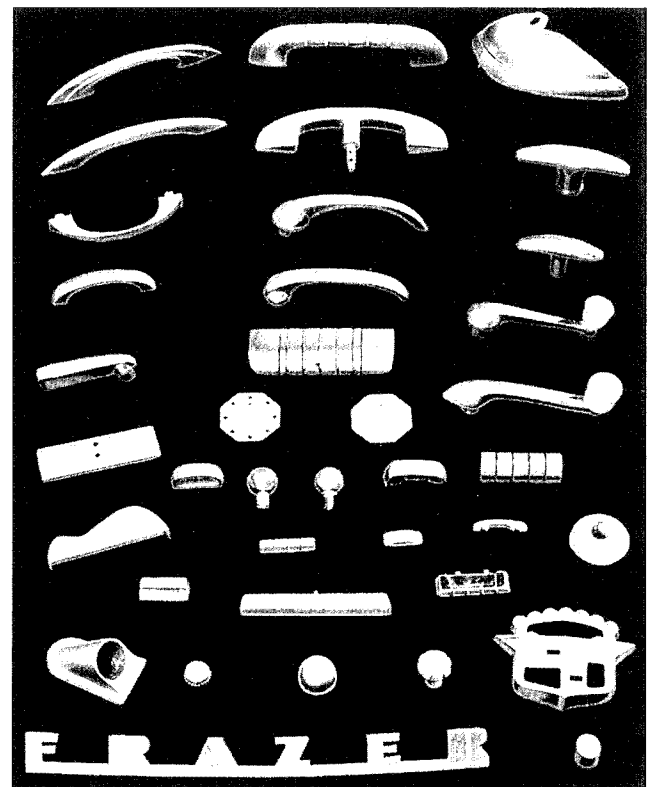
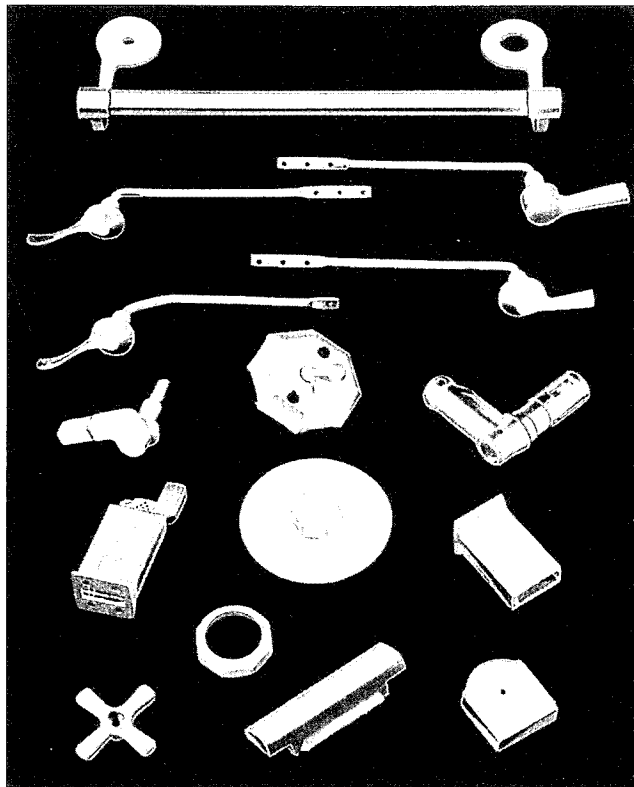
All under the same Middleville roof, Keller set up an engineering and drafting department, milling machines and lathes, die-casting machines, plating and trim operations, and a shipping department.

they just know they can produce it for this price and make a profit. But they really don't know their costs.

"On every project, Fred would have detailed down to the finest point what he felt it could be built for. But he went a step further. When they produced the part, they kept a detailed list of all their costs and then compared it with the actual production. If anything went wrong, they knew where the correction had to be made. To me, this was very unusual. I never ran into that in any other place."

Mary Mead, a CPA and vice president of a major accounting firm, was a financial adviser to the Kellers for a number of years. Interviewed by William Houseman before her death, she pointed to Keller's ability to analyze and act upon a situation as a key to his financial success. "I find him very satisfactory to deal with because he understands what you're talking about," she said. "Successful people are sometimes difficult to advise. They think they know more than anybody about everything. Fred isn't that way. He comprehends the explanation as it applies to his situation, and then he decides whether or not to follow my advice. That's a very satisfying way to work. He can see the details. But he isn't so blinded by them that he can't see the larger picture."

The ability to see the larger picture is also what has kept Keller's businesses at a consistently high level of quality. "His business strategy has always been to be on the leading edge of technology and make a higher quality product than his competitors," says Arden Johnson. "I have seen him make numerous changes...each time discarding a mature product and moving on to a product of the future." Johnson also remembers Keller's early days in the tool and die business when a number of shops started slashing prices in hopes of getting bids. Keller held out for quality at a fair price and, as usual, came out the better.



Middleville Engineering became highly successful, and Fred stayed with it and the Kaljer Company for nearly 10 years, the longest job commitment of his life to that point. But the work had grown tedious. Keller never enjoyed the repetition of production and the small day-to-day problems it brought. He wanted problems, big challenges, that he could work through to solutions. When the Jervis Corporation offered to buy his share of Middleville Engineering in 1953, he told his associates he would just as soon complete the deal.

As part of the negotiations, Jervis commissioned a study evaluating the value and future potential of the Middleville and Kaljer companies. Its conclusions were testimony to the regard others had for Keller's management ability. According to the consultants, Booz-Allen, and Hamilton, there were risks involved with the purchase of either company. "The growth potential and security of profits of Middleville and Kaljer rests on Mr. Keller's abilities." The report's authors believed the company would not be nearly as valuable if Keller were not at the helm. "His independence and love of a problem, we firmly believe, will far transcend any attraction of the routine administrative job of a professional manager." This consideration, it concluded, "must limit the value of Middleville to any potential

Middleville Engineering and Manufacturing Company products ranged from handles, knobs and company insignias to plumbing fixtures. Fred Keller's patented flush-toilet handles are grouped below the towel rack at the top.

buyer.” Although he did not see it at the time, years later, a banking friend shared the report with Keller. Despite the report’s caveat, Jervis went ahead with the Middleville purchase, and Kaljer was sold to a Detroit buyer. Many years later, Middleville was purchased by Gulf and Western and ultimately closed. Under a different name, the Kaljer facility is still in operation.

The Jervis Corporation didn’t fare well operating Middleville on its own. A series of bad decisions left the company in financial disarray. Little more than a year after the purchase, R.E. Jervis, who had relinquished much of the control of the company to others, called on Keller to come back and serve as the Jervis Corporation’s sales manager.

It was a big challenge. Previously, Keller had functioned as his own sales force. He believed in what he called “selling by doing.” It suited his nature, and his companies, to work proactively with customers. “I’d get an idea about something they could do and take it to them,” Keller explained. “If they liked the idea, we’d produce it for them. My whole theory is that if you have a good product and do the right thing, you don’t have any trouble in sales. We sell by reputation.”

Nonetheless, Keller felt he couldn’t turn his old friend down and agreed to take on the job. He handled it quite well, but the work grew less satisfying for him every day. Although the company’s ledger started to improve, Keller met with resistance from many in the shop who believed he was bidding too low. This meant he had to redesign much of the tooling himself in order to meet the quote. He was also taking on additional managerial duties, which only heightened his impatience with the constant infighting over pricing.

By 1958, Keller had enough. Throughout his life he had overcome challenging situations through bold and dramatic moves. Now it was time for another. He took a six-week leave of absence, and he, Bernie, and their two children—Kathy, 14, and Fred P., 11—set out on a tour of Europe. The family visited ten countries and

were, by Kathy’s recollection, treated royally wherever they went. The experience was a profound influence in her decision to become a history teacher.

A CAREER TAKES SHAPE

“You’ve got to be thinking about what the future’s going to bring....”

Although he was nearly 50 years old, Keller’s career was just beginning to take shape. He decided to leave Jervis Corporation, opting once again to become a consultant, and rented office space from the former chief chemist for Middleville Engineering, who was already well on his way to establishing a plastic plating business. Keller began exploring the possibility of a partnership with the man, but a legal entanglement spoiled the



Fred and Freddy pose with a local character during a stop on the Kellers family’s 1957 European tour.

arrangement. He had signed a non-compete agreement when he left Jervis, and a number of the Jervis Corporation's directors said his relationship with the chemist violated this contract. With barely more than a shrug, Keller did another career turnabout and took on several businesses over the course of the next few years. Just as his proficiency with automobiles had led to a backyard full of cars during his teenage years, so now did his business acumen earn him offers to take on struggling companies and return them to profitability. In many ways, Keller personified the image of the corporate turn-around artist that became prevalent in the mid-1980s. Again, he was years ahead of his time.

The first two businesses he became involved with were Pearson and Buttrick, a small tool and die shop, and the Cadey Aluminum Foundry. By default, he also acquired a contracting company that laid underground pipeline—he had lent money to a group of investors and when one of the principals died, Keller ended up with a 50 percent share. The company would eventually complete major street extension projects, including water and sewer lines, in East Grand Rapids and Walker.

For the time being, money was tight. Yet Keller seemed unconcerned. His daughter, Kathy, who describes him as “a man with an earthy self-confidence,” saw no discernible difference in her father's behavior. Others, including son Fred P., saw in practice a man whose faith is in the upside of a risk. “My dad believes that if he moves into a new area and has to lose money for a while, he will. He wants to learn about that area...he wants to find out what's happening.”

Keller himself says, “Don't worry about today. Worry about the next day. The worst thing about many companies is they've got eyes in the back of their heads. They can't look forward. You've got to be thinking about what the future's going to bring...and how it's related to your organization.”

Busy with his new companies, but not completely satisfied, in 1962 Keller received a call from an old friend that would again change his life. Herman Quenson had done business with Keller at Middleville Engineering, and when Quenson went out on his own, Keller loaned him some money for equipment. Later, Quenson's company, Paragon Tool & Die, made dies for Keller. But Paragon was struggling financially by the 1960s, and Quenson was looking for a buyer. “I thought I could close it out so the former owner wouldn't have to sell his house,” Keller would later remark. “He turned it over to me for \$1. All the stock—and all the bills.” But that \$1 was only the beginning of Keller's investment. When he took over, the company consisted of about \$15,000 in equipment, but had nearly \$30,000 in outstanding debt. In order to bring assets and liabilities into line, he would need to dramatically improve his production.

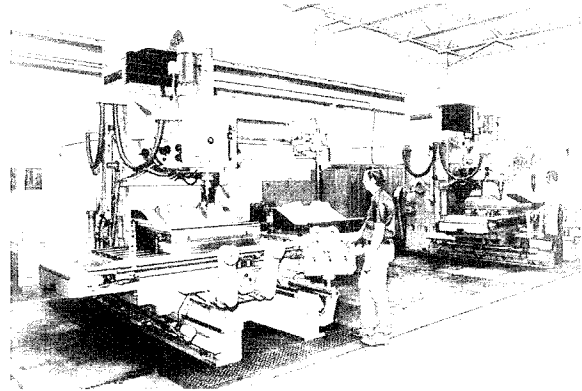
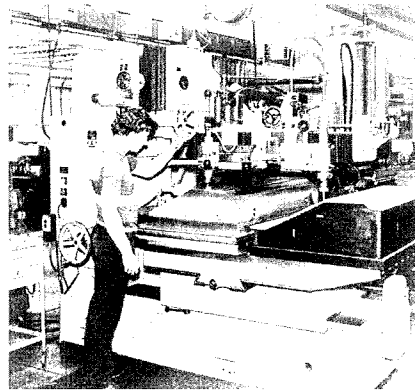
Paragon was a stiff challenge, but it was also an opportunity for Keller to have his own business and run it according to his values and beliefs. He became the sole owner and president of Paragon Tool & Die in December 1962, and shortly thereafter began investing in better equipment. Bringing Paragon's account book and balance sheet to a banker friend and asking for a loan to purchase additional equipment, Keller pointed out that with new contracts he had secured, the equipment and receivables exceeded company liabilities. Eventually, the bank agreed to assist Keller with the purchase, not so much because of the value of Paragon's assets, but because of the confidence its loan officer had in Fred Keller and his ability to operate a profitable company.

The bank's confidence was well placed. Acting on the longstanding belief that investing in the right equipment and building strong business relationships will result in productivity and profitability, Keller had Paragon operating at a profit in a year. The policy he promulgated then, of investing 100 percent of depreciation in new equipment and

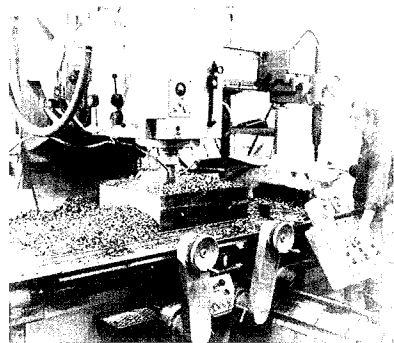
The original Paragon Die and Engineering Company, located at 3001 Madison SE, was purchased by Fred M. Keller in 1963.



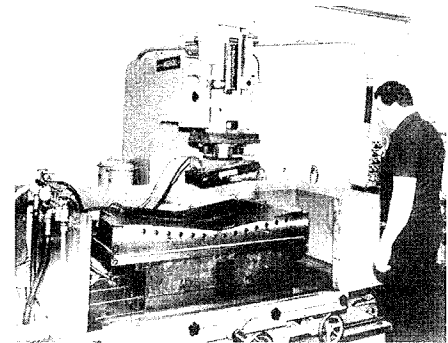
As plastic molding replaced many zinc and aluminum parts, Paragon steadily expanded its capabilities. By the 1980s, the plant boasted the latest technology, including these duplicating milling machines capable of handling huge blocks of steel.



This milling machine is in the process of turning out an automotive grille.



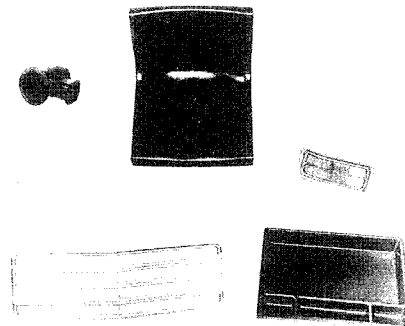
This automotive grille mold is being created using a process known as electrical discharge machining.



In the "build up" area, pieces for dies and molds were assembled into their final form with the aid of hoists capable of lifting up to 15 tons.



Paragon Die and Engineering turned out the molds for these automobile grilles, chair seats, desk trays, and smaller parts.



technology, remains a core tenet of his management philosophy. “It’s always been my practice as long as I’ve been in business,” he says. “I may not spend it all in one year, but if there’s a way we can find of doing things better, we’ll invest in doing it.”

THE TOOL AND DIE INDUSTRY: AN ECONOMIC CORNERSTONE

“You can be the biggest...I want to be the best.”

The development of tools and dies can be traced to Eli Whitney, inventor of the cotton gin, who introduced the concept of using interchangeable parts in manufacturing. Previously, machine parts had been individually constructed by highly skilled craftsmen and no two were exactly alike. Under Whitney’s system, each part was made to specific and uniform dimensions by using tooling, or tool-guiding patterns, and crude fixtures that were the forerunners of today’s tools and dies. Whitney successfully employed the system to mass produce firearms for the U.S. Army in 1798.

Manufacturers of other products quickly adopted the technology, and by the middle of the 19th century, machine shops were producing tools and dies for manufacturers throughout America. Advances such as the power press, a machine able to cut and form sheet metal into predetermined shapes, furthered the technology. By the 20th century, new forms, such as metal die casting and injection molding, required new tooling, most of which was handled by tool and die shops.

Modern tool and die making has seen the evolution of specialized approaches to tool making. Within the framework of the basic press die, there are options that range from simple bench presses for small components to multi-story, multi-ton units that punch out car roofs and other large-scale parts. It was also within this arena that a major breakthrough was developed. During World War II, it was discovered that a number of operations could be combined in a single die by turning and tilting the piece of metal after each step. These progressive dies allowed for the production of metal parts that had previously required as many as 20 different dies. Following the war, new materials and techniques greatly increased the industry’s flexibility. Plastics, in particular, provided a material that did not require the high temperatures and pressures of existing technologies. Computers spurred the development of automated equipment. These advances allowed forward-thinking shops to drastically reduce the time required to produce a particular tool or die.

Much of the manufacturing diversity long present in the West Michigan area came about as a result of the tool and die industry. While the area was dominated by lumber and wood-related industries until the close of the 19th century, the basic principles of tool and die making were familiar to the area’s manufacturers. Most routinely developed jigs, fixtures, and tools for their own operations and were able to transfer their tool-making knowledge to other applications as they shifted to the manufacture of commercial and consumer appliances and parts for the automobile industry.

Among Keller’s riskier moves at Paragon was to drop the aluminum die-casting operation. From producing such heavy-duty aluminum items as grilles, transmission components, and housings, he gradually moved into building molds, incorporating new technologies along the way. Most notably, he began making molds for plastic, which was becoming a dominant material in automobile manufacturing.



From its modest beginning, Paragon Die and Engineering by 2000 was a recognized industry leader in the production of dies and molds for parts of all sizes and applications.

Chrysler was among the first automakers to increase business with Paragon. Connections again played a role. One of Chrysler's die-cast engineers had worked for Keller at Middleville Engineering—and was also the brother of Paragon's plant manager. He now headed the carmaker's Kokomo die-cast plant and respected Paragon's work. The relationship with Chrysler prospered. Ford and GM followed, and Paragon's role as a mold builder began to grow.

Keller's reputation as a fair, no-nonsense businessman was reaffirmed nearly two decades later in an encounter with Lee Iacocca. Fresh off his recent appointment as chairman of Chrysler Motors, the charismatic automaker was stepping up efforts to rejuvenate the company. In order to do that, he bargained hard with each of Chrysler's suppliers, including Paragon, trying to get them to accept promissory notes or delayed payments. Paragon had a contract for a die program worth about \$1 million, perhaps not very large for Chrysler, but a substantial amount for a company of Paragon's size. As the company had done with other vendors, Chrysler proposed fulfilling the contract via promissory note.

Fred Keller said no. Iacocca, anxious to keep production moving, telephoned Keller and asked what the problem was. "Chrysler's credit isn't that good," was Keller's reply. Iacocca fumed. But Chrysler managed to come up with the money, and the dies were delivered on time. Chrysler also remained one of Paragon's largest and most loyal customers.

Keller's grasp of new technology played a pivotal role in the company's fortunes. During the 1980s, Paragon was able to cut its mold-building time in half—down to 20 weeks and less—a tremendous advantage when working with time-sensitive automakers. The dramatic time savings came as a result of the practical application of computer technology. Every aspect of Paragon's operation was transferred to computers. First, the office was streamlined by putting the cost system on line. This facilitated quoting, materials pricing, and job tracking. Then CAD (Computer-Aided Design) systems were integrated with engineering and design. Finally, a CAM (Computer-Aided Manufacturing) program was used to run production equipment. So effective was the ability to build "virtual" molds on



computers that Paragon's model shop sat empty until Keller could find another use for it.

Increased international transportation and communications technology, and Paragon's forward-thinking leadership, began to attract global clients. The company purchased a lot of German machinery, and Keller made frequent trips overseas to review new equipment and share ideas. On one trip, the German automaker Opel asked if he could produce molds for them. Keller named a price, which turned out to be nearly 30 percent less than the company was paying in its home country. Keller made numerous other friends overseas and was more than willing to share ideas. When asked whether it was good business to show someone else how his company used its technology, Keller replied that he would rather have someone he trusted know how to do it than have it fall to someone he didn't trust.

Paragon continued to build tools for German companies, and later added Spain, France, and Japan. The Japanese, noted for their technological wizardry, were greatly impressed with Paragon's technology. "We were so far ahead," Keller said. "They couldn't read what we gave them. We had to build a model for them so they could look at it."

West Michigan tool and die shops were thriving in the 1970s and 1980s, and Keller remembers some friendly competitive conversations with his contemporaries. One, in particular, boasted how he would someday own the biggest shop in West Michigan. Keller's response was, "You can be the biggest...I want to be the best."

Keller has never had a preoccupation with the size of his companies, but was concerned instead with their success. In fact, he considers a smaller company a virtue in maintaining a good working relationship with employees. "You've got a closeness [with a smaller shop]," he explains. "If you get too big you lose that closeness." The words are backed up by an open door policy maintained by Keller and his management team. Keller also walks the floor of his plant to see what's going on and how his people are doing.

Keller's companies have never been unionized. No effort has ever been made to organize Paragon, and the five attempts at Middleville went down to convincing defeats each time. One of the union tactics most often used to try and sway Keller workers was a

Aerial view of Paragon Die and Engineering, located at 5225 33rd St. SE, Grand Rapids, Michigan.

comparison of base pay rates. While Keller's hourly rates were lower than those at union shops in the area, the company employed an incentive plan, based on the number of parts produced by each employee during each shift, that more than compensated for the lower base rate. "The only thing they [the union] could say was 'You're working too hard to make that kind of money.'" But it was a system that helped Middleville grow, by retaining old employees and adding new ones. The work ethic practiced at the plant enabled the company to consistently meet quick deadlines while other shops, which often shared contracts with Middleville, couldn't deliver. Middleville employees noticed and took pride—in the reputation of their shop, and in the size of their paychecks.

Keller relishes retelling the experience he had with one long-time employee who was a regular participant in union organizing efforts. Always on good terms with the employee, Keller finally asked why he continued to work with the union. The employee responded that he knew the vote would never go through, but that the union provided free beer every time its representatives came back to the shop. "Then after the election, when we beat the hell out of them, you throw a party." He was just availing himself of a good opportunity, a not un-Kellerlike approach that made Fred smile.

There were other advantages that made Keller shops good places to work. When employee benefits packages became an issue in the workplace, Keller responded with a progressive program that included hospitalization, full dental and optical coverage. Keller also studied pension plans, which became a major benefit factor when retiring employees began to realize that Social Security wouldn't cover all of their expenses. Initially, Paragon instituted a federally guaranteed plan, but government assessments to bail out other companies' underfunded plans soured him on the program. Opting out, Keller took the money and reinvested it in an employee 401(k) plan. The company matches employee contributions, which, Keller says, are typically at the maximum level.

Keller's most important contribution to the current benefit package is a productivity-based incentive plan. The unique twist is that the incentives are not tied to corporate performance, but only to shop productivity. "It's not a bonus plan," Keller explains. "A bonus plan is based on profits...but we could be losing money and with the incentive plan our employees still get their share. I feel that if people in the shop work hard and we don't make money, it's management's fault."

It is this give and take, Keller maintains, that is the essence of the modern work ethic. "I think that any work ethic developed in an area depends upon the employer," he says. "I think if an employer treats his people right, they respect it...and they give good treatment back in return."

A powerful indication that Keller has always run a good shop is the fact that many of his employees have been with him their entire careers. Paragon controller Anne Williamson was the bookkeeper when Keller purchased the company. Now, he says proudly, she has more seniority than he does. Williamson, who knows Keller as well as anyone can outside of his own family, attests to Keller's management style: "He can be impatient...and he can be abrupt, especially with passive people. But I also know that with all the boys in the shop, that he's respected for his fairness. They may not always like his decisions, but they know he will treat everyone the same."

Joe Corrigan, Paragon's long-time general manager, is a die maker whose relationship with Keller dates back to Middleville Engineering. He describes Keller as a man who, by example, makes his employees feel important. "He wants to be number one in the industry, and to do the things that will keep us number one. There's nothing that pleases him more than to take a group through the plant and tell them why we're doing this or that. It's great for the whole organization. It's great for the guy who's got just a

year's seniority—he sees he's got a future...a good future."

As Paragon grew, both domestically and internationally, other old-line tool and die shops began to fall by the wayside. Size and lack of foresight, maintains Keller, were the main contributing reasons for these failures. As more customers, particularly automakers, began to outsource, they also began to demand faster turnaround times. Keller says a number of companies grew too large specializing in a particular technology and either wouldn't, or couldn't, respond quickly enough to the changes.

Keller also points to a number of larger businesses in the community that are now dealing with employee dissatisfaction—some for the first time—and restates his conviction that personal involvement is a critical management tool. "You see these family businesses that never had any trouble with unions...the father would recommend ideas to his son and so on down the line. It was a family deal. But then when things hit a snag, and employees get laid off or lose a bonus...it's up to the family to do something about it. If they are close to their employees and keep them informed...it works out."

INVESTING IN THE FUTURE

"You got a job and learned something there."

While Fred Keller believes in holding every customer to the same payment standard, he is equally willing to risk his capital with potential suppliers who can show him something new and have a good plan for bringing it to market. Such was the case in the late '60s when he met with a pair of young Detroit men who'd just set up shop in an abandoned gas station. The men were engineering graduates of the University of Michigan, and Keller was impressed with their ingenuity. Their company, called Tarus, had produced some new production machinery employing the latest technology that caught Keller's eye. He asked if they could produce some equipment for Paragon.

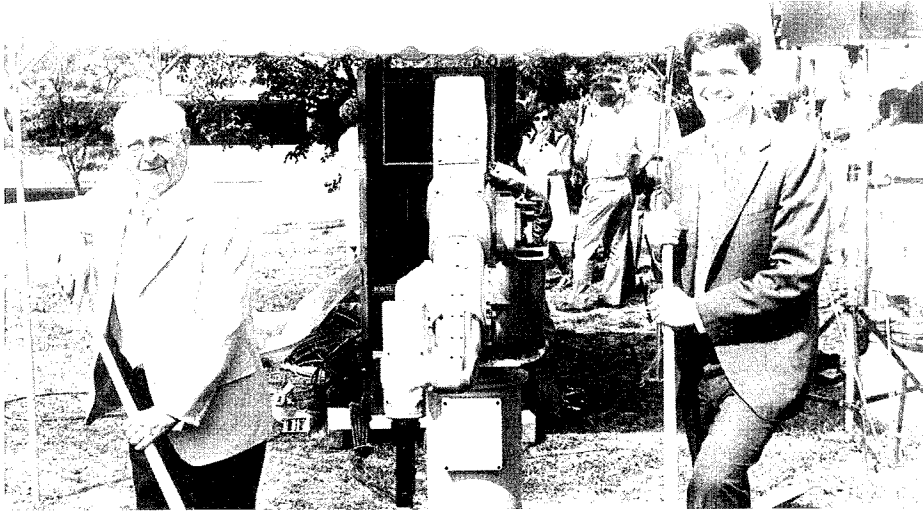
Keller laid out the details and the two young men said they had the technical know-how to handle the project, but they didn't have enough money to order materials. Keller gave them a contract anyway. He also bought the steel and sent them money for payroll, and they produced the equipment he wanted. "I've still got the machine operating to this day," he says. "They built the computer, the machine, everything." Tarus built other production equipment for Keller, and Paragon became something of a showcase for the company's early work. And although Tarus now operates a plant that Keller says "makes my place look sick," he says it with a sense of satisfaction that he was able to provide some help along the way.

Keller's respect for budding ingenuity has manifested itself in more formal ways over the years. Perhaps remembering his own rise through the ranks, Keller was, and is, a strong believer in hands-on education. As proof that practical education pays off, he cites his own experience of two years of training at the Hackley Manual Training School, where he learned mechanical drawing and mathematics and also received instruction in machining, tool and die work, and repairing automobiles. "Then," he says, "I got to work. That's how you did it. You got a job and learned something there."

As a businessman, Keller put this approach into practice. During the 1960s, he and a group of local manufacturers, members of the local chapter of the National Tool and Machining Association (NTMA), founded the chapter's Mold Builder School, which trained about 25 students a year, culled from as many as 250 applicants. Each shop in the association sponsored a student. Graduates were presented with a set of tools and, in return for

their education, agreed to remain with the sponsoring company for at least five years.

The school remained in operation until the development of the Grand Rapids Community College Applied Technology Center, where Keller is a member of the foundation board. His belief in such programs remains strong. Over the years, he has hired numerous graduates from the NTMA mold builder program, as well as those from the Kent Skills Center, the technology center and a similar program at Ferris State University.



FATHER AND SON AT WORK

*"If you work for me,
you've got to do it my way
and you're not going to
learn anything."*

Fred M. Keller's son, also named Fred and known as Fred P. to avoid confusion, has furthered the family reputation. (A friend recently suggested the "P" in Fred P.'s

At the ground-breaking for Grand Rapids Community College's Applied Technology Center, Fred M. and Fred P. Keller proudly took up shovels side by side to celebrate their shared contribution to technical education in Grand Rapids.

name stands for plastics, and the "M" in Fred M.'s name stands for molds.) Fred P. attended Cornell University in the late 1960s and remembers the conversations he and his father had about the future. The senior Keller told his son not to worry too much about grades, but to learn what he needed to know, enjoy the experience, and graduate.

Fred M. did suggest he learn something practical, and the younger Keller chose metallurgical engineering. Following graduation, Fred P. got a job with Pratt & Whitney but, like his father years earlier, grew increasingly impatient with what he saw as a limited future. "He probably felt the same way I did at Shaw-Walker," Fred says. "He told me he was number 87 in line for a promotion and saw less qualified people with more seniority getting the jobs. He decided he would rather go into business for himself."

After six years, Fred P. returned to West Michigan. In addition to Paragon, Fred was still operating a couple of smaller companies, but Fred P. said he didn't want to run those. "Well, you can't work for me," his father told him. "If you work for me, you've got to do it my way, and you're not going to learn anything."

Keller advised his son to get involved in what he saw as a breakthrough industry—plastics. Fred P. heeded his father's advice and took an entry-level position with a small West Michigan company. Unimpressed with the technology at first, Fred P. eventually warmed to the task and in 1973 started his own business, Cascade Engineering, with two injection-molding machines and six employees. The company supplied a variety of molded pieces for the automotive and office furniture industries, but remained small for several years, until it received a breakthrough contract as a direct supplier to office furniture giant Herman Miller. Development work on Herman Miller's best-selling Equa chair, as well as a role in developing acoustical barriers for General Motors products, led to rapid growth in the mid-1980s. Fred P. now heads a family of companies that employ more than 700 people in 10 separate manufacturing facilities in the automotive, office furniture, and con-

tainer fields. In addition to his domestic operations, Fred P. operates StarCade, a joint venture with Starlite Co. Ltd., of Osaka, Japan; Systex Products Corporation, a joint venture with Systex of Japan; Sound Alliance, a joint venture with Gurit-Essex of Zurich, Switzerland; and Cascade Engineering Europe Kft, headquartered in Budapest, Hungary.

On occasion, Cascade has also served as a complement to Paragon. Where Fred M. was concerned with the big picture, the idea, the tooling, Fred P. has focused more on replication and manufactur-

ing. Their two companies were, for a time, located next door to each other and both thoroughly enjoyed a symbiotic working relationship. One of their most satisfying collaborations began in 1994, when Chrysler Corporation's Advanced Engineering Group approached Fred P. to lead the team that would produce the prototype of its new Composite Concept Vehicle (CCV), a car with an all-plastic, injection-molded body. Injection molding is the process whereby plastic is forced into a closed mold

under pressure. As its part of the team effort, Paragon was tapped to produce three 160-ton steel molds, each as large as a minivan, for three body panels. Weber Manufacturing Company of Midland, Ontario, would make the fourth and final body mold, and Cascade Engineering would produce the single-unit, full-body, all-plastic prototype.

Not only were Paragon's plastic injection molds to be the largest ever made, but Chrysler wanted them to be portable and finished in less than a year. Normal construction time for molds of such enormous proportions was at least a year and a half, and the idea of transportability was unheard of. But Chrysler was adamant. The purpose of the car was to provide inexpensive automobiles for emerging markets around the world, and the automaker needed to be able to move the molds to several locations. With father and son greatly enjoying the experience, Cascade and Paragon produced a unique, segmented mold that Paragon designed in 12 weeks and built in 40 more. The unveiling of the CCV in 1999 at an auto show in Frankfurt, Germany caused automakers everywhere to rethink the role of plastics in their industry. At the time, Thomas Moore of Chrysler's Advanced Engineering Group expressed his company's belief that the car could make plastics a key player in the auto industry's hunt for fuel-efficient, low-cost vehicles in both developed and emerging nations

Fred P. credits his father for giving him support and encouragement, but his father is quick to point out that the younger Keller is very much his own person. "He's always had independence. Years ago, until he got his staff built up, I used to walk through his plant. I would say 'I saw so-and-so. Did you take care of that?' or 'What do you think of such-and-such?' Sometimes I had to bite my tongue, but I would never tell him what the answer would be. I just put the question."



This proud crew at Paragon Die and Engineering made the mold that was later used by Cascade Engineering to turn out prototypes for Chrysler's CCV, the first all-plastic automobile body.

SHARING THE WEALTH

"That's the biggest part of life...helping somebody else out."

In an ownership career that has spanned nearly 60 years—and longer if you count his many youthful enterprises—Fred Keller has admittedly lost track of all the businesses he has bought and sold. The challenge was the important thing, along with building and maintaining supportive relationships—with associates, employees, and his community.

A thread of giving has run throughout Fred Keller's life. From as early as he can remember he received help from family and friends. Later on, he used his work, and its profits, to express his gratitude. Whether helping a young engineer start his career, getting a fledgling company off the ground, putting a struggling business back on its feet, or quietly lending an employee the down payment for a house or car, Keller has kept the same faith he believes was accorded him when he was a young man. Impressed by a creed of mutual support and fellowship, Keller became a Scottish Rite Mason in the mid-1940s, and later a Shriner. An active Shriner for several decades, he is today honored as an Ambassador-at-Large.



A Scottish Rite Mason, Fred M. Keller is also a member of the Saladin Shrine and served as its treasurer for several years.

Keller maintains he has never lost a dollar on money that he advanced to an employee, although on one notable occasion he thought the string would be broken. He had lent a worker funds to buy a new truck. The worker happened to be active in one of the union organizing efforts, and when the union lost the employee left. Keller figured that he'd never see the money again. About two years later, there was a knock on the door of the Keller summer cottage. Bernie answered. The man insisted on seeing Fred. He was the former employee who'd borrowed the money for the truck. He now had a landscaping business and told Fred he would take care of tree trimming around the cottage for the next two years.

Keller's philanthropy is, like the man, both fair and far-reaching, and while he is not one to boast about what he gives, he is not shy about sharing the reasons behind his giving. "You see, the thing is this: I think that you say you've got a connection, but I remember through my whole life that it's always been some friend—Deke Bennett, or the guy who ran the tool room—who gave me a chance. All those places and the opportunities are all friends, and I think you owe it to the community to do something for what it did for you. That's the biggest part of life...helping somebody else out."

Commitment to community service is a philosophy shared by the Kellers and imbued in their children. Bernie Keller has been active in several community organizations, most notably the Mary Free Bed Hospital Guild, where she served as a board member, board secretary, and president. The decision to build a new, larger hospital on a new site came during her term as president. She also served on the hospital board's planning committee and helped to select the architect for the new facility. She was an officer of the Women's City Club and has been a long-time active member of the United Methodist Women's Society.

Both Fred and Bernie Keller have been accorded community recognition for their efforts. Three awards stand out. In 1992, they received the prestigious Emeritus Award from the Emeritus College of Aquinas College, given annually as a tribute to an individual or couple's leadership, generosity, and service. A year later, Fred was inducted into the

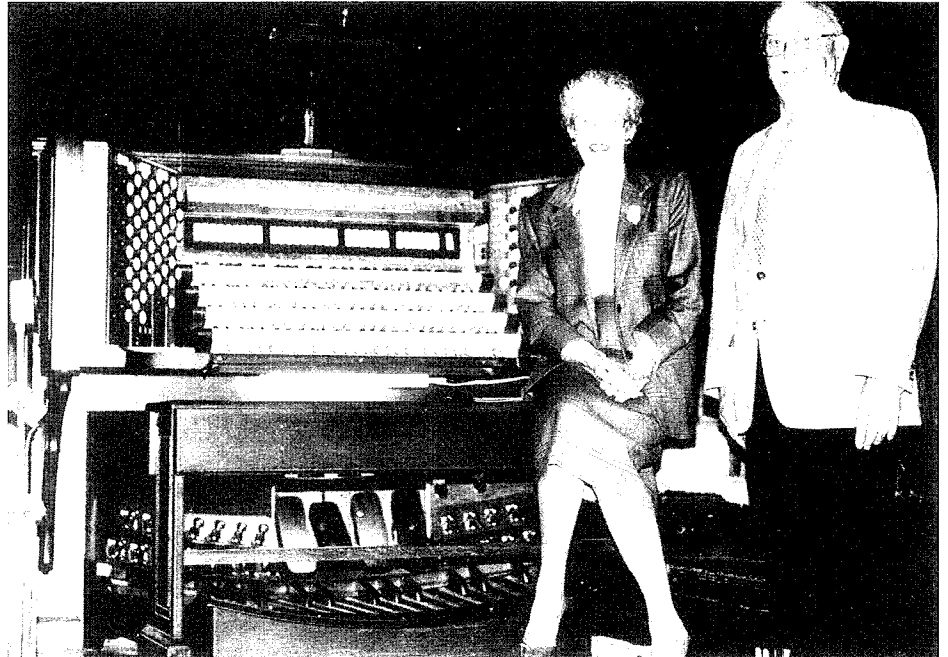
Greater Grand Rapids Business Hall of Fame, which is sponsored by Junior Achievement of the Greater Grand Rapids Area. Fred also received the first Philanthropist of the Year award conferred by the West Michigan United Methodist Foundation. Subsequently, the award, given annually, was renamed the Fred M. Keller Philanthropy Award.

As Paragon began to prosper in the late 1960s and 1970s, the Kellers established a pattern of financial generosity that continues to the present.

One of the first organizations to receive their support was the M.J. Clark Memorial Home, founded in 1906 as a retirement home for its ministers and their widows by the West Michigan Conference of the United Methodist Church. By 1970 the home had grown to a general retirement facility, serving over 300 persons, with an annual budget approaching \$1 million. Fred began serving on the Clark Home board in 1975, applying the same practical thinking to the home's problems as he did to his businesses. "He was very helpful from early on," recalls Bob Perl, who became the home's director about the time Fred joined the board. "He did what I think Fred does very well. He gets people on the right track and lets them do their work."



Fred and Bernie Keller pose proudly at the restored First United Methodist Church organ.



That work included funding the initial effort to incorporate computers into Clark Home's operation. Keller also combined his business and charitable skills to provide the home with the financial foundation it needed to create a new retirement-living community. He

Fred and Bernie Keller, surrounded by their children (Fred P. and Kathy are 2nd and 3rd from the left in the back row), grandchildren, and their spouses, and the Keller's first great grandchild, Jimmie. Fred and Bernie are confident their commitment to their community will be carried many generations into the future.



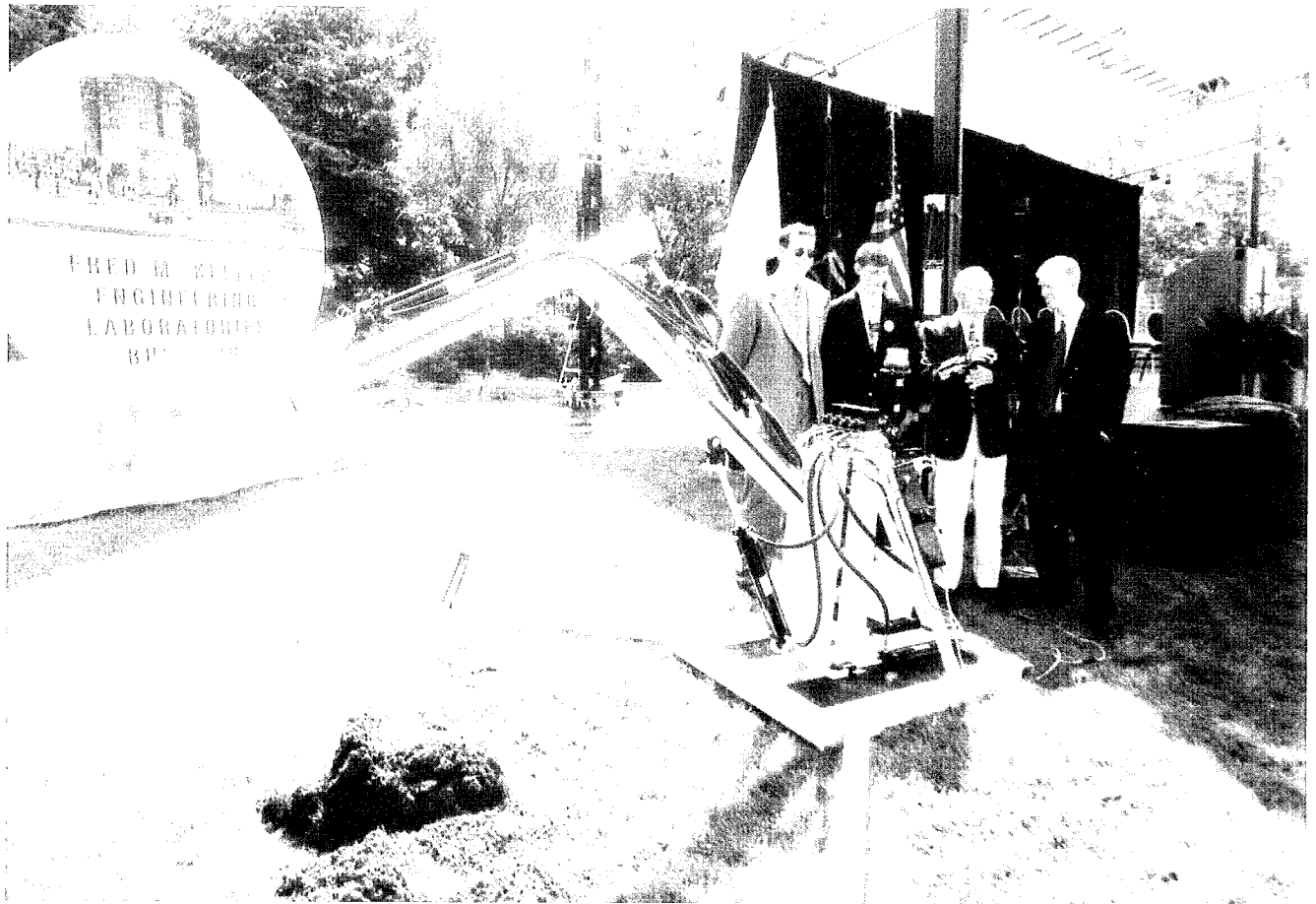
Fred and Bernie Keller created the Keller Foundation as a way to give back a portion of their good fortune to their community.

believe in the principle of tithing and felt that 10 percent of Paragon's corporate profits should be placed in a charitable foundation. The list of organizations that have benefited from the Kellers' generosity is long. Bernie's love of music is shared by her family, and the foundation has donated generously to the Grand Rapids Symphony, St. Cecilia Music Society, the Grand Rapids Choir for Men and Boys, and a summer music series at Meijer Gardens. When their church, First United Methodist, needed to renew its pipe organ, they were pleased to fund the effort. Youth groups and education are another area of interest. The Keller Foundation supports the Boy Scouts and Girl Scouts, the Public Museum of Grand Rapids, Junior Achievement, Grand Rapids Community College, GROW (an organization to help women start new businesses), John Ball Zoo, Camp Blodgett, St. Johns Home, the Grand Rapids Children's Museum, East Grand Rapids Public Schools, and Henry Paideia Academy of the Grand Rapids Public Schools.

More recently, the Kellers have taken the lead in supporting the technical education initiatives at Grand Valley State University. When the university announced plans for a \$6

had sold the Pearson and Buttrick Tool Company to the Dolo Corporation, but he still owned the building, which Dolo leased. Expansion plans prompted Dolo to move, and Keller worked out details to sell the building to a nearby business. Proceeds of the sale went to the Clark Home, along with Keller's promise to contribute half the money needed to buy the retirement community site and help find donors for the other half as well. In addition to annual gifts, the Kellers contributed \$1 million to the Clark home, now called the Clark Retirement Community, in 1992, and their support continues to the present. Most recently, the Keller Foundation announced a gift of \$1 million to the Clark Home Benevolent Care endowment fund, to assure that the home will continue to provide care for residents who have exhausted their resources.

In 1980, Fred and Bernie Keller formed the Keller Foundation to formalize their tradition of providing assistance to their community. They



million Engineering Laboratories Building, the Kellers, through their foundation, made a \$2 million contribution. This time, Claire Jarecki and Leslie Tassell, another old friend from the tool and die business, joined Keller in supporting the university's effort to expand practical training for its engineering students in the Padnos School of Engineering. Other major contributors to the facility included the Steelcase Foundation and Mrs. Audrey Sebastian, whose late husband James is credited with helping start Grand Valley's School of Engineering.

Located next to the GVSU Eberhard Center and Meijer Public Broadcast Center, the Engineering Laboratories Building is an innovative structure designed to strengthen practical learning opportunities for the university's nearly 1,000 engineering undergraduates and 250 graduate students. Programs in the building support Fred Keller's belief that practical experience is a critical part of student preparation. The engineering school's mandatory co-op program integrates academic and real-life engineering experiences. "I've always wanted to help people get trained and make a living," Keller told the university at the time of the gift. "They [students] need to get their hands on things. I want students to know what the field is like before they graduate, so they can be sure it is what they want to do, then they are more likely to enjoy what they're doing for a living. People who are happy in their work are usually successful."

At the groundbreaking ceremony in the fall of 1999, the university announced that the facility would be named the Fred M. Keller Engineering Laboratories Building to honor its largest benefactor.

With Fred Keller operating a remote-controlled shovel, ground was broken in the fall of 1999 for Grand Valley State University's Fred M. Keller Engineering Laboratories Building.

NEITHER RETIRED...NOR RETIRING

"I never liked sitting still...still don't. Once you get a handle on something, it's time to build on that and find out how to do it better."

Fred M. Keller

In 1999, Fred and Bernie took steps to turn over greater control of Paragon Die and Engineering and the Keller Foundation to younger family members. They named their daughter, Kathy, to the position of foundation chair. Kathy brought a background as an educator and community volunteer to the new post. Trained as a social studies teacher, she has taught in Glenco, Illinois, Forest Hills Middle School, and Grand Rapids Henry Paideia Academy and served as president of the East Grand Rapids School Board. Most recently, her activities have centered on Henry Paideia Academy, a Grand Rapids central city school where she co-chairs a 100-volunteer program coordinated through First United Methodist Church.

In a letter to their family written at the time they turned over control of their foundation, the Kellers described the pleasure it gave them, and their expectations for its future:

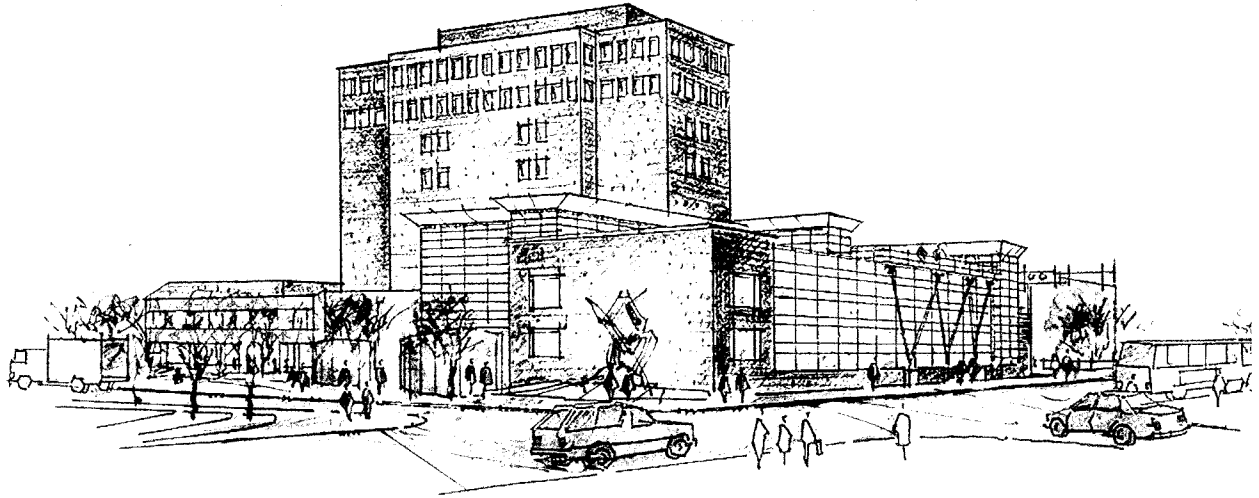
The Foundation in these nearly twenty years has given very generously to dozens of worthy causes, and we as trustees are grateful for that warm feeling we get when we read the thank you letters.... We have found joy in giving an unexpected gift of a fax machine or a copy machine to a worthy office. There is much good that can be done in this world, and we like to think we are answering a few needs with our gifts.

Our two children, their spouses and their children are all an active part of the Foundation. The cry from them is, "Don't ever let anything happen to the foundation. We are very proud to be members and it must continue after you are gone." So we are confident that the Keller Foundation will have an impact on our community for many years to come.

At the same time, Fred stepped down from his position as chief executive officer of Paragon, relinquishing his last formal control of the company. In 1991, he had turned over daily operations to a new president, Ralph Swain, and eight years later he decided it was time to transfer executive control to his son, Fred P., who became chairman of the board of directors, and his son-in-law, William Muir, who serves on the executive committee. A new president, Dan Hess, took over in the spring of 2000.

Although he is no longer directly involved in the day-to-day operation of Paragon, Fred Keller still makes his presence felt there. He rises early and visits the plant often, chatting with long-time employees, introducing himself to new ones, and keeping an eye on what's new, what works, and what might be the next big thing.

As Fred Keller begins his tenth decade, he is looking at a new century in much the same way as he did the last—straight in the eye. He has witnessed the evolution of the auto industry, of new tooling and manufacturing technology, new materials, the computer age, and new ways of doing business. In many cases, he was the one leading the way, the one who had reasoned things out and applied new technology with his own special touch. And Fred Keller is still doing things his way.



FRED M. KELLER ENGINEERING LABORATORIES BUILDING

Grand Valley State University