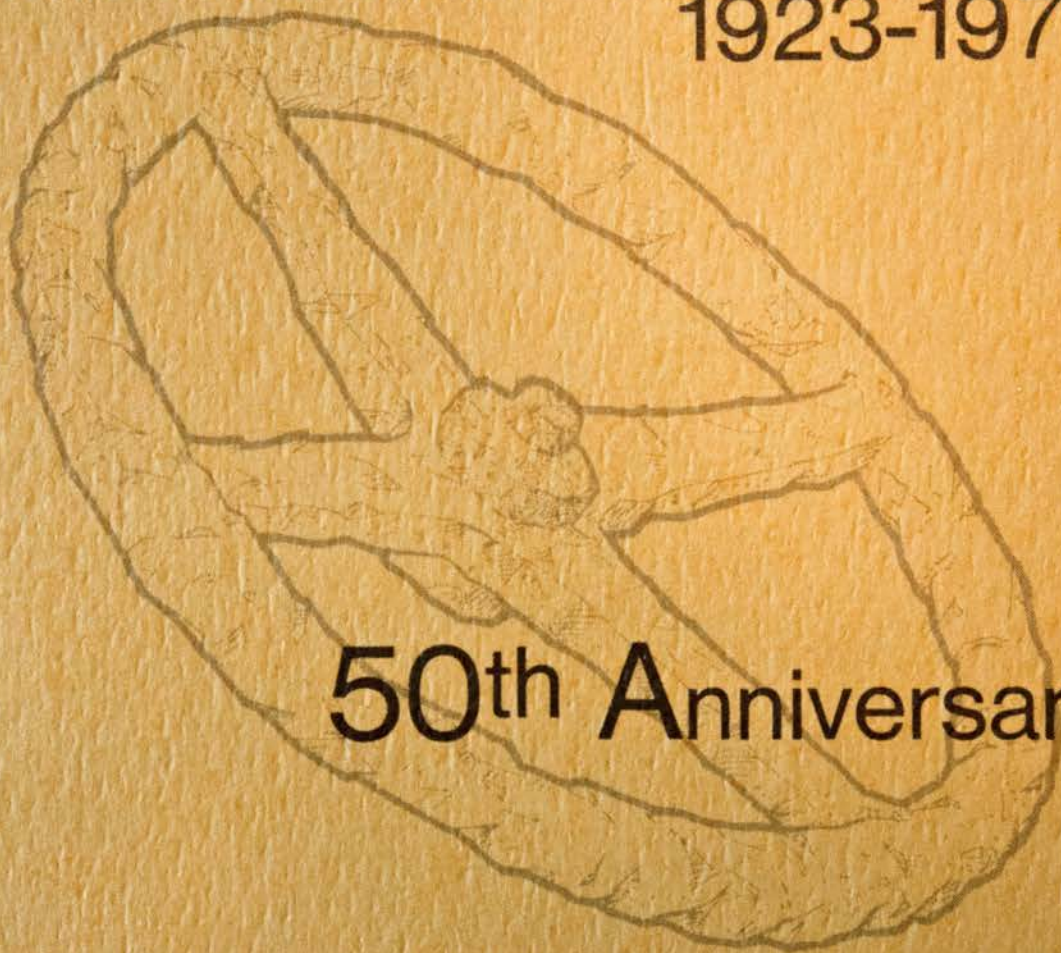


1923-1973



50th Anniversary

**It Started with the Wheel...**

**Inland**

Division of General Motors

## Proclamation

JAMES H. MCGEE  
MAYOR



CITY OF DAYTON, OHIO  
OFFICE OF THE CITY COMMISSION  
MUNICIPAL BUILDING - THIRD & LUDLOW STS. - PHONE 222-2641

### PROCLAMATION

WHEREAS, the month of January marks the occasion for the celebration of the 50th Anniversary of Inland Division, General Motors Corporation; and

WHEREAS, Inland has played a significant role in the economic development of the Dayton Community, having grown from a small Company employing a few hundred people to one of Dayton's largest Companies providing jobs for almost 7,000 people; and

WHEREAS, Inland employes have, through years of perseverance and research, developed many new and innovative products which have created new jobs for the people of the Community; and

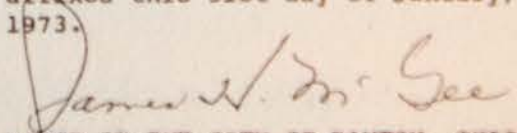
WHEREAS, the Community of Dayton, Ohio, wishes to honor Inland and its many employes.

NOW, THEREFORE, I, James H. McGee, Mayor of the City of Dayton, Ohio, do hereby proclaim that this day, Wednesday, January 31, 1973, be designated as

### INLAND DAY

in Dayton, Ohio, and call upon the citizens of this Community to observe this day with appropriate and appreciative ceremonies.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Seal of the City of Dayton to be affixed this 31st day of January, 1973.

  
MAYOR OF THE CITY OF DAYTON, OHIO.



### *It Started With The Wheel*

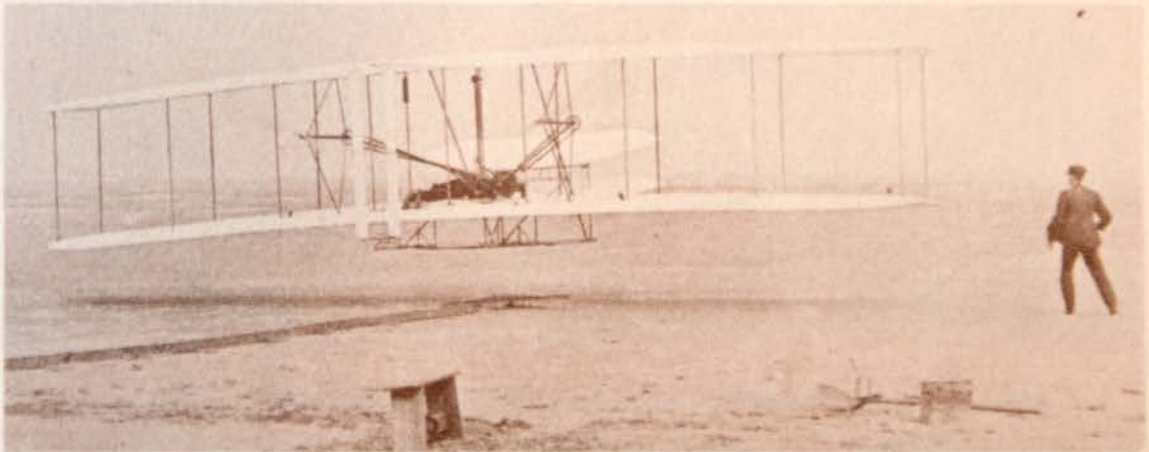
In 1902 two brothers from Dayton were looking for someone to build an engine for them. What they wanted to do was bolt it to their glider and fly like a bird.

They had no luck. The makers of engines either were too busy to be bothered with men who thought they could fly, or their products did not meet the high standards of Wilbur and Orville Wright.

After all, the Wright brothers wanted a four-cylinder motor which could work up a brutish eight horsepower.

What could have been the end of a dream was only a temporary delay for the Wrights. If no one would build an engine for them—why, they'd build one for themselves. No matter that they had never built anything like it before.

Their minds uncluttered by the doubts which nag ordinary humans, they built the engine in six weeks, fastened it to their big kite, and flew.



### *First Powered Flight — 1903*

When the first airplane heaved awkwardly into the winds of Kittyhawk, N. C., the Ohio brothers knew they had given birth to flight. What they didn't know was that they had also given birth to the Inland Division of the General Motors Corp.

Perhaps even more important, the Wright's penchant for trying things that had never been done

seemed to set the course for the company that was to follow.

What came of that flight at the turn of the 20th Century was a company whose people have been free over the years to try just about anything they can envision.

"Our strategy," general manager Thomas Mathues said on Inland's 50th anniversary, "is to pioneer."

Inland has pioneered—from the airplane to the steering wheel to the ice cube tray to the rifle to the air bag which it is hoped will save the lives of many motorists.

This is how it all came about:

When the Wright's proved man could conquer gravity, interest in the airplane took off, no pun intended. But it was World War I that really got man thinking of the possibilities of flight.



*Dayton Wright Airplane Co.  
Plant 3 — Now Inland Payroll Dept.*

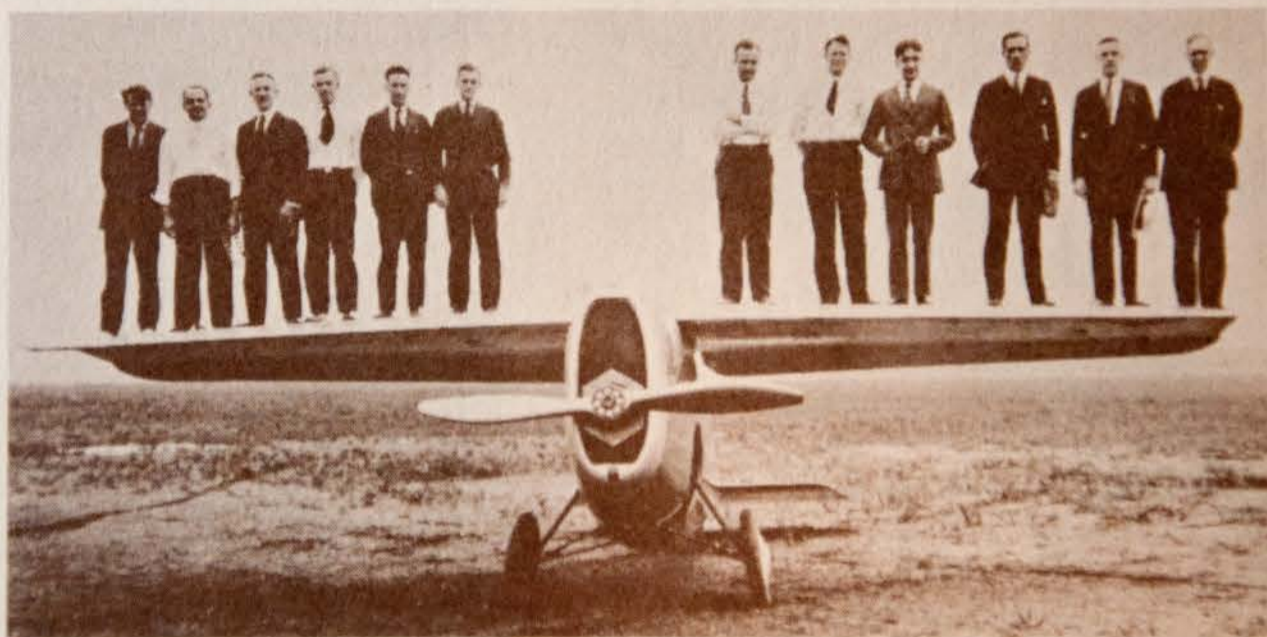
The thought of what a plane could do in wartime—bomb, strafe, spy—set minds in motion. The fact is that there weren't many minds more in motion in those days than those belonging to a group of inventors known admiringly as the "Dayton Gang."

Among them were such men as Charles F. Kettering, Col. E. A. Deeds, Col. H. E. Talbott and, of course, the Wrights.

Kettering, Deeds and Talbott had established the Dayton Metal Products Co. and had done innovative work with the automobile. Intrigued by flight, they brought Orville in to experiment on airplanes and the Dayton Wright Airplane Co. was formed in Moraine City, south of Dayton.

The history of Dayton Wright could be summed up this way: Spectacular in war. A boondoggle in peace.

The company built the only warplanes made in America for World War I. It was called the DeHavilland-4 battleplane. When armistice came in 1918, 8,000 Daytonians were turning out 40 planes a day. In all, Dayton Wright made 400 training planes and 3,100 fighting ships. And it made them, you might say, from the ground up.



*Dayton Wright Executives — W. S. Whittaker, Sixth From Left, First Inland General Manager.*

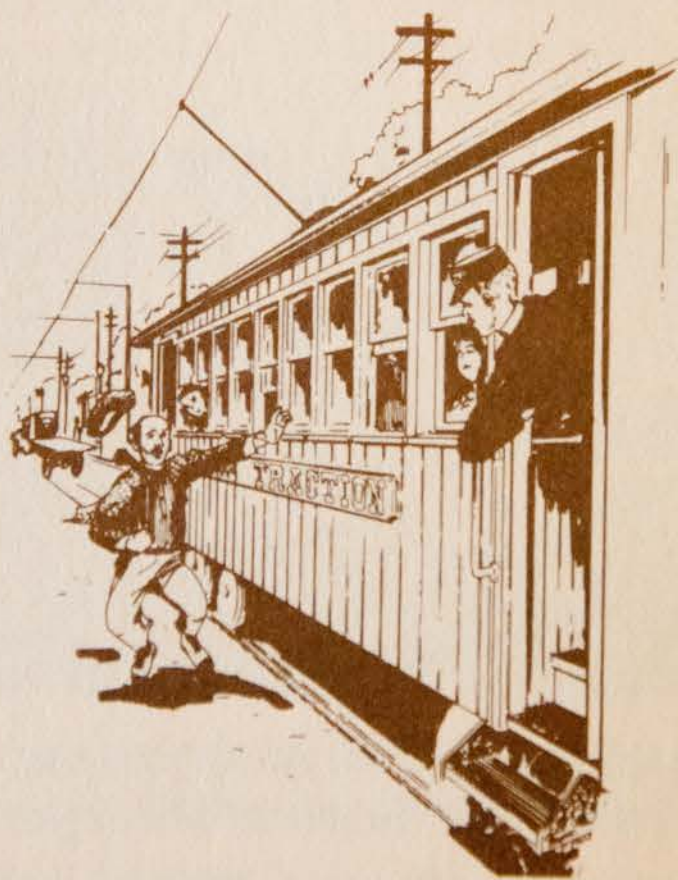
After the war, the men at Dayton Wright were sure that the era of the airplane was upon them and that soon the common man would be flying from place to place—that it would become the average man's horse and buggy.

So the company broke out with a full stable of peacetime planes. There was the Cabin Cruiser, which could race 120 miles an hour; the luxurious

Aerial Coupe and the Nine-Hour Cruiser, named more for its range than its endurance.

At about this time, air travel was beginning to fascinate some people in high places at the General Motors Corp., a firm engaged in another form of transportation. The company also wanted such brains as Kettering's on its payroll, so in 1919 Dayton Wright became a General Motors subsidiary.

Speaking of payroll, things were a little more, well, informal in those days. Matthias Lause was hired into the Wright payroll department in 1920. Fifty-three years later he recalled that all employes were paid weekly in cash and the entire payroll was taken from the bank to the plant wrapped in newspaper so that it would look like a large lunch.



One day he took a traction car from the bank to the plant, casually set the payroll beside him and just as casually got off without it. Fortunately for Lause and all the other Inland employes, the other traction car riders were not hungry and what must have been the most expensive lunch in town was later recovered intact.

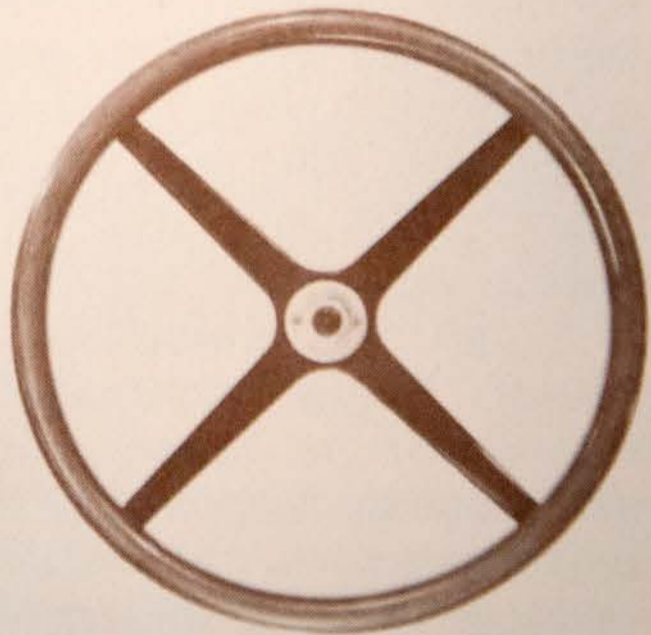
But things were not going well with Dayton Wright. The backers of the airplane had a good idea, but the future of mass transportation was somewhere between the horse and the plane. It was with the car. The company lost money and GM lost interest and went back to doing what it knew best—making cars.



All of which left Dayton Wright without a sponsor, with a product that wasn't selling and with employees facing a jobless future.

Company officials brainstormed day and night for a way to salvage their investment and they came up with several basic judgments. One was that the auto was the coming thing. The other was that GM was a likely star to hitch their wagon to. The next question was: What can we make for the auto?

Here fortune was kind. There was one component that suppliers literally could not come to grips with—the steering wheel. They were trying to make it out of solid wood, which was wasteful, difficult and deadly when it splintered in an accident.



It just happened that a young Wright engineer had come up with a better idea while working on airplanes. H. D. Geyer did it by wrapping a thin strip of veneer. It not only was better. It was cheaper.

On Dec. 22, 1921, Chevrolet ordered 1,000 steering wheels. The next April, Cadillac followed suit. With the new product a new company was formed on Jan. 6, 1923 with stock owned by General Motors.

It was called Inland Manufacturing so as not to limit it to any one product. Freedom to wander and experiment was written into its name.



### *The Birthplace Of Inland*

The new company found a home in the old Dayton Wright Plant No. 3 buildings off West Third St. in Dayton. Its first general manager was Wallace S. Whitaker. Idea man Geyer was named chief engineer.

At its birth, Inland had one basic product and 225 employes. Fifty years later it had 7,000 employes making 224 products. No birth is easy, not in the animal world, and not in the world of industry.

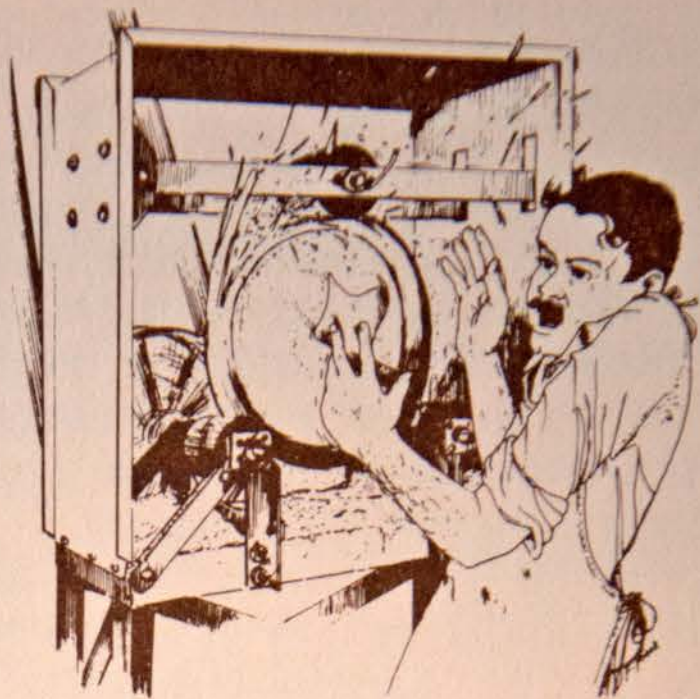
"I can still remember the old wrapped steering wheel," Geyer reminisced some years later. "I can remember its heavy, black malleable iron spider and how by expanding its spokes, it was inserted into the rim.

"How in a sea of smelly glue and surrounded on all sides by long, thin strips of elm, we attempted to fabricate our first wheels. How we passed the strips through the glue spreader and how we took the five unwieldy strips and carefully wrapped them under tension around the rotating mandrel.



"But in spite of all the care, the strips shot off from the rim like a pin-wheel."

Geyer was a man from the same mold as the Wrights and Kettering. By the time he left Inland, he had 175 patents.



"He used to sit with his feet on a desk that he had made out of apple trees and just think of new products," assistant chief engineer Robert Antheil, a long-time associate recalled.

"He had everyone looking for new products. He let us work on any idea we thought of. One day we made a popsicle machine."



*H. D. Geyer*

"From the very beginning," the restless-minded Geyer said, "we realized that wood with all of its faults would have but a limited use on the coming automobile."

"With this in mind, a laboratory was equipped and personnel selected, largely from the workmen in the plant, to study the possibilities of rubber and other molding materials. From this little group, many of our products originated."

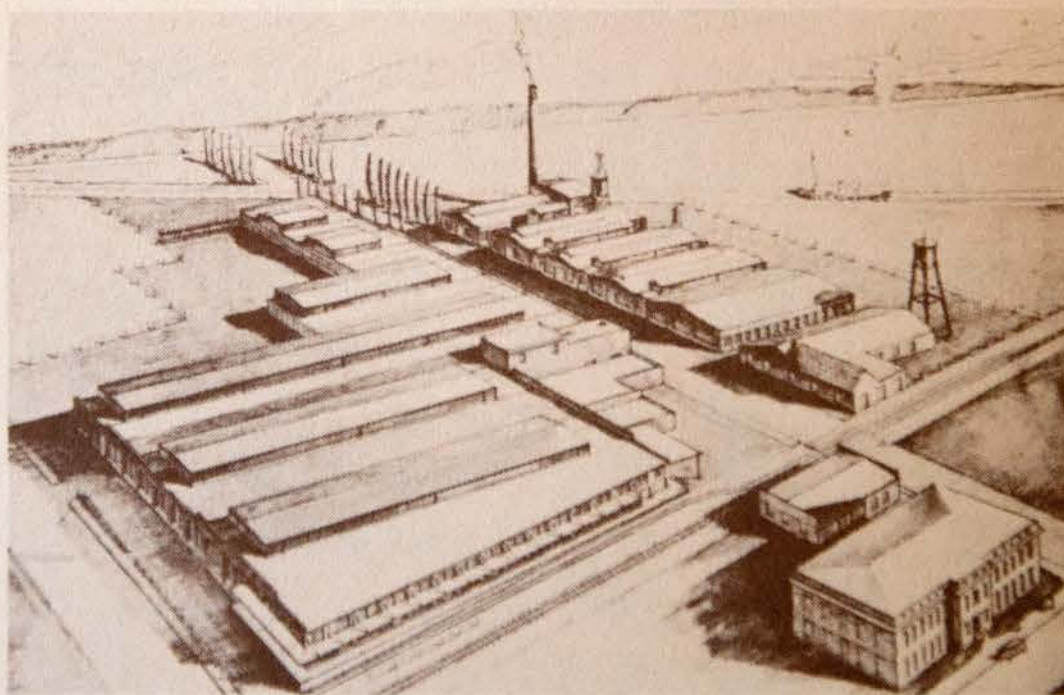
By the end of its first official year, Inland had

lost money and it continued to lose money the second year. Had it not been for the confidence of G.M. Officials that this small and struggling organization would eventually make a real contribution to the automotive industry, it might well have floundered during the first two years.

Inland was learning a basic lesson that would stand it in good stead: Research and development is expensive so you had better make something good enough to sell.

At the same time, GM was laying the ground-rules under which Inland was to operate. "Every division is required to order all their steering wheels from you," chairman Alfred Sloan wrote, providing Inland met the schedule and "at a competitive price."

In other words, Inland's parent was a customer only so long as Inland stayed competitive. That early rule was to stay in effect throughout Inland's history.



*Architect's Sketch — Inland 1930*

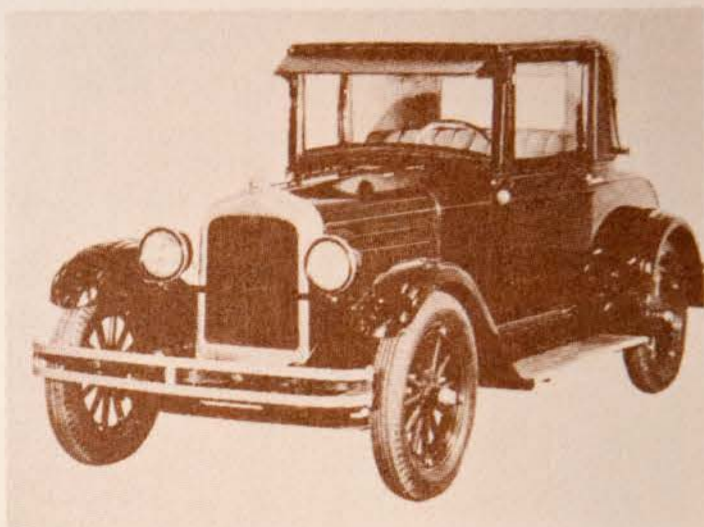
When the Great Depression struck, Inland was changing over from a woodworking plant to a rubber factory. Floor space was increased and more emphasis was put on technical staff. That decision has been maintained.

"We are strong technically," Mathues said on the company's 50th birthday. "A pioneer has to be. Our

high ratio of engineers and scientists to the total has been a major factor in our growth. Although we employ many other people from all the major disciplines of Engineering and Sciences, organic chemistry is our forte—especially polymer chemistry.”

So, while the Depression was laying waste to much of the American economy, Inland was running scared and growing.

People were still buying cars and Inland was supplying them with not only steering wheels, but rubber running boards and motor mounts and other rubber parts. The running board, by the way had the radio antenna hidden beneath it.



*1926 Pontiac*

Along about this time, another Dayton invention was helping Inland. The refrigerator, pioneered by sister GM division Frigidaire, had created a demand for a new product.

Americans wanted a supply of ice, when they wanted it. So Inland entered the ice tray business. The tray is an Inland evolution. Two basic problems faced ice tray engineers—getting the water frozen and getting the frozen cubes out.

Rubber trays were great for getting the cubes out. The trouble was, it took several days to freeze them, rubber being a miserable conductor. The solution was metal trays with an ejection mechanism. Inland soon became the largest tray maker in the nation, producing more than 60,000-a-day in 150 varieties.

By 1934, Inland minds were working past rubber to plastic. Geyer, it was said, used to wander through the plant muttering: "Everything is a plastic—everything—steel, glass, metals, organics—they are all plastics. Give me enough pressure and I'll mold them, twist them, bend them the way I want them."

He put plastic to work to make steering wheels, radio grills and other accessories. Now Inland was working on just about the full gamut of materials: Wood, rubber, plastic and metal. Metal? Certainly. Metal was used as a center around which to mold plastic and rubber. And don't forget the ice trays.

The Thirties were years in which ideas bounced around like hot molecules and the company shot out in many directions.

By 1940, Inland was making 425 different products. Other than auto products, it made parts for refrigerators, washing machines, radios, airplanes, trains, escalators, motorcycles, tractors, vacuum cleaners, diesel engines and outboard motors. And, oh yes, coffee grinders.

An average day in the late Thirties saw the growing complex churning out 17,000 running boards, 15,000 steering wheels and 60,000 small molded parts. It was doing something else, developing a way of life.

Corny and trite as it may sound to future, more sophisticated generations, Inland was developing into a big family which seemed pleased with its lot.



The first company newspaper was printed Feb. 15, 1935. It shows a way of living much different from

television-dominated days ahead.

Company sports were a passion—everything from the basic American pastimes to rowing and target shooting. An orchestra was formed and there seemed to be an endless line of parties and picnics. Garden space was made available for those who wanted to grow their own vegetables.

“The thing I remember most,” Edward Leschansky recalls, “is that everyone was your friend.” Leschansky had a lot to remember. He joined the company in 1927 and retired as a general foreman in 1965.

Another pioneer was Don Roth, stock superintendent, who signed on in 1933. “One of the delightful things about Inland to me” Roth said, “is the informality of the place. No one at Inland is ‘mister.’”

But no condition is constant and by 1940 something was happening overseas that would disrupt life at Inland. War was in the wind and it came with Pearl Harbor. Two weeks after the bombing, Lause was named Inland defense coordinator and the plant switched from making products for mankind’s enjoyment to something exactly the opposite.



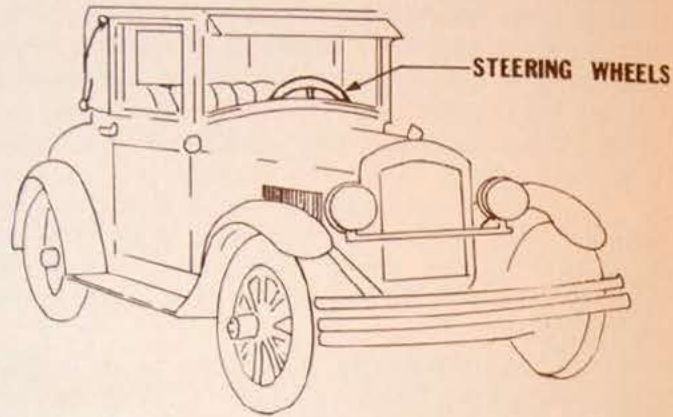
*M. A. Lause*

Good as Inland’s peacetime record was, nothing it did equalled its effort in World War II.

What the company did was to start from nothing and produce what became America’s standard ground weapon in quantities never made before.

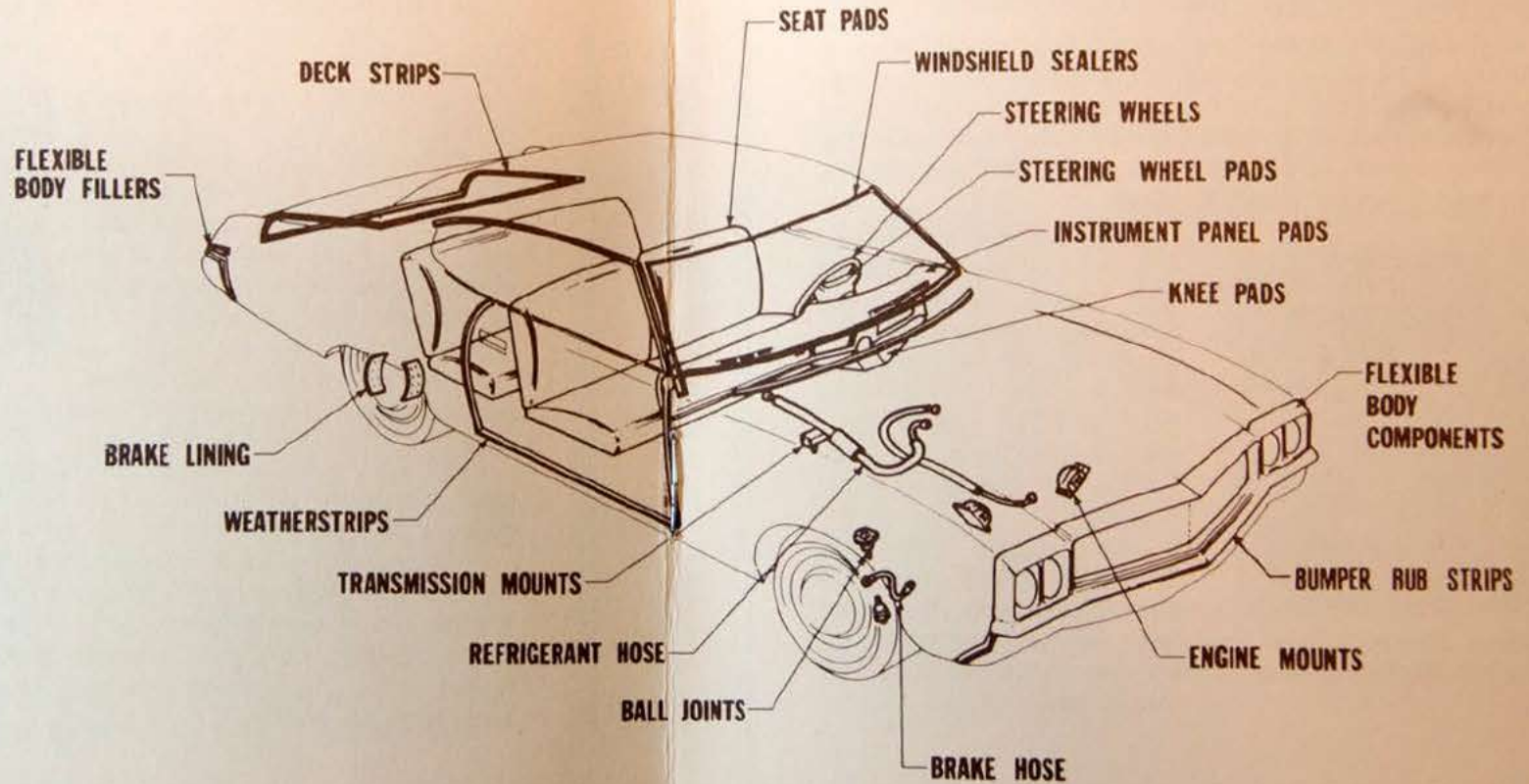
Working around the clock, Inland brought the full force of its technology to bear to make something it had never before attempted—the M-30 carbine. Remember the Wrights and the engine? With them it was pride. For Inland, in the forties, national survival was on the line.

# INLAND PRODUCT LINE



1923: LIMITATION

1973: DIVERSIFICATION





### *Carbine Assembly Department*

The first order for the stubby, five-pound rifle came two days after the Japanese attack on Dec. 7, 1941. When the company did not deliver its first weapon until the next June, there were those who were beginning to believe that a rubber factory had no business making guns.

But what the engineers were doing was making a carbine that would immediately meet the toughest service and cost standards and one which could be spewed out of the West Side factory like so many running boards and steering wheels. Being competitive was a tough habit to break.



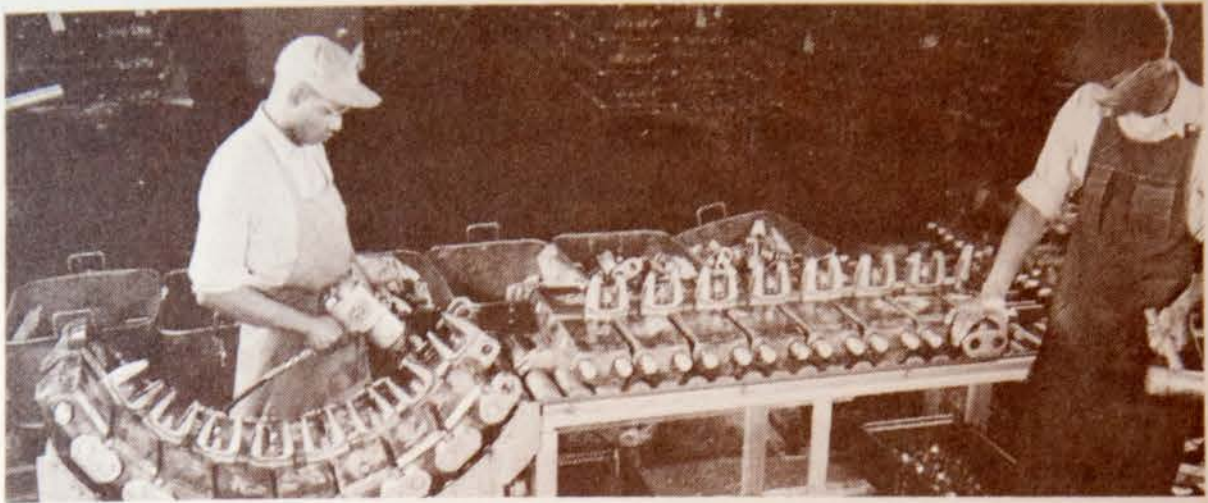
*Gen. James Kirk —  
1,000,000th Carbine*

Six months after making the first carbine, Inland had made 100,000. Six months later, 500,000. Eighteen months later, 1 million. The 1 millionth was put on permanent display in the U.S. Ordnance Department's museum.

Inland made 2,600,000 carbines in all and apparently made them to last. Some were captured in the Vietnam War, 25 years later.

The carbine was judged America's best ordnance effort of the war by the U.S. chief of ordnance.

Oh, it should be noted that in between making the rifles, the company also managed to make 68.8 million miscellaneous rubber parts, 2.1 million helmet liners, 142,708 complete tank tracks,



*Over 140,000 Tank Track Assemblies  
Were Manufactured At Inland*

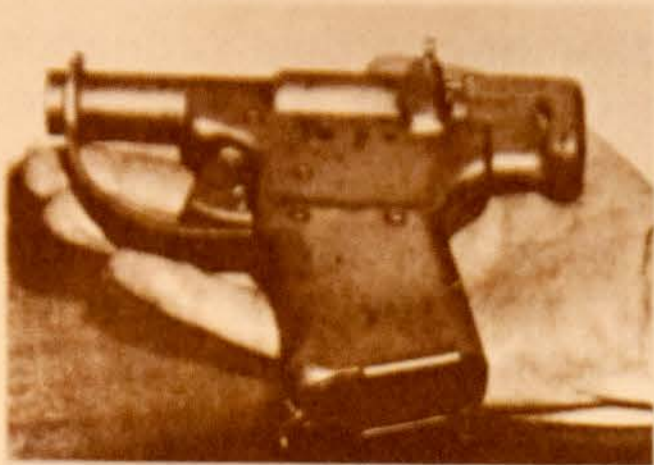
846,000 clutches, 40,000 gun sights and 13,688 gun shoulder rests.

One more note of interest before leaving the war. Inland not only made weapons for American fighters, but for the Allied underground as well. It made what was called The Little Monster and it was one of the best kept secrets of the war.

President Franklin Roosevelt and Britain's leader, Winston Churchill were meeting to discuss the planned invasion of Europe. The spontaneous Churchill burst into Roosevelt's bedroom one morning at 4 a.m. and said: "What we need Franklin, is a two dollar pistol, about a million of them. It shouldn't weigh more than a pound."

When Roosevelt could clear his mind, he realized that Churchill wanted a savage little gun that could be dropped over Europe to help the resistance for the coming invasion.





*Little Monster*

The U.S. command cast about for someone to do the job. And who had the best track record? Right. Inland. The company designed and in three months helped make one million Little Monsters which kicked like a mule, weighed just over a pound and

cost less than \$2 each. Walt Disney designed the package they were to be dropped in with cartoons for operation instructions.

Just before the war ended, Inland's floors were filled with 6,500 employes. One month later, defense contracts cancelled, the company had 2,500. The country had survived the war. Now Inland had to survive the peace.

One thing that helped considerably was that production had been halted for four years and Americans were fairly itching again for that most American desire—a lovely smelling new car. It was only natural that about this time, Inland began to turn more of its attention to the auto market.

By the early Fifties, its energies partly siphoned during the Korean war when it made tank tracks, Inland was making these parts for cars: Steering wheels, ball joint assemblies, brake lining, engine and transmission mountings, pedal pads, bushings, window weather strips, defroster hose, decorative plastic parts, hood emblems, piston cups, bumpers, pillar posts, steering wheel monograms, gear shift knobs and turn signal levers.

While consumer hunger was working for the good at Inland, another national post war force was at work.

Union activity was controlled during the war period. It was to be expected employes and their

Unions would be pressing for higher wages and benefits as the war drew to a close. On November 26, 1945, the fledgling Local 87 of the United Rubber Workers Union at Inland, joined — for a 16 day period — the other Unions in G.M. plants during what eventually became a 119 day strike for them. This 16 day period, along with two walk-outs of two days duration each in the earlier Forties, is the only strike activity in Inland's 50 years.

That strike activity almost 30 years ago was the exception that proved the rule. Inland has been blessed with comparative labor peace. Recognition of mutual interests by and the sincere and patient effort of Management and Labor in satisfactorily adjusting any differences has been the foundation for this peace.

Long service retiree Ed Leschansky characterized this by remembering: "It was a friendly place to work. We were well paid. There was a savings program. There was room for advancement and the employes did a lot of things together. As I recall, we settled most of our differences among ourselves sitting on the benches in front of the plant when we weren't working."

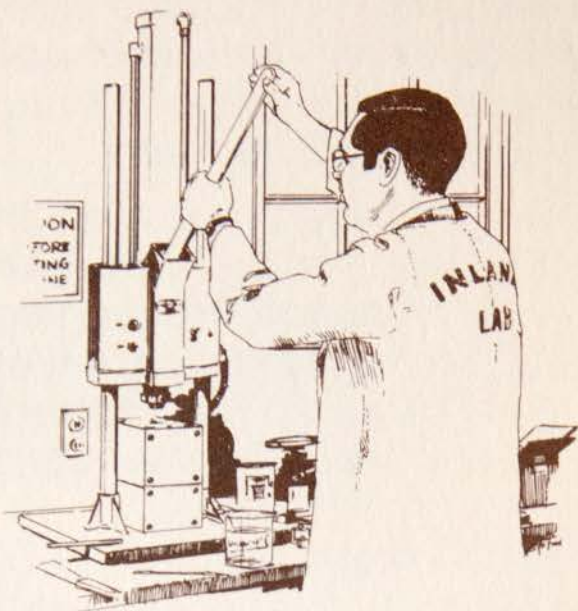
While there was strength in an alliance with the auto industry, the Fifties began showing several weaknesses. One was wage rates. In 1956, General Manager O'Brien stated this alliance had created rates as much as 40% above competition — a considerable difference to overcome.

That year the company lost money on all new jobs. As if this weren't enough, an economic recession was at the doorstep and the public appetite for cars



*J. D. O'Brien*

began to dull. What Inland had to do was use its heritage for innovation, better tools and methods to increase productivity and to concoct some profitable new products.



With much riding on the results, the company's laboratories came up with such items as latex weather strips, instrument panel pads and urethane foam seats. The storm was ridden out and a groundwork was laid for the future.

In 1961 Leslie C. Wolcott became General Manager, and with new urethane and friction material products taxing the floor space at Dayton plants; Inland acquired the land and buildings vacated by Aeroproducts when they moved from Vandalia to Indianapolis.

This added approximately 700,000 square feet of manufacturing area used for instrument panel pad, brake lining and brake hose production.

For Inland and other manufacturers, the Sixties brought in a different challenge. The decade started well with the company landing 31 parts on GM's answer to foreign competition—the revolutionary little Corvair.

What wasn't immediately realized was that the Corvair was to become a central figure in a

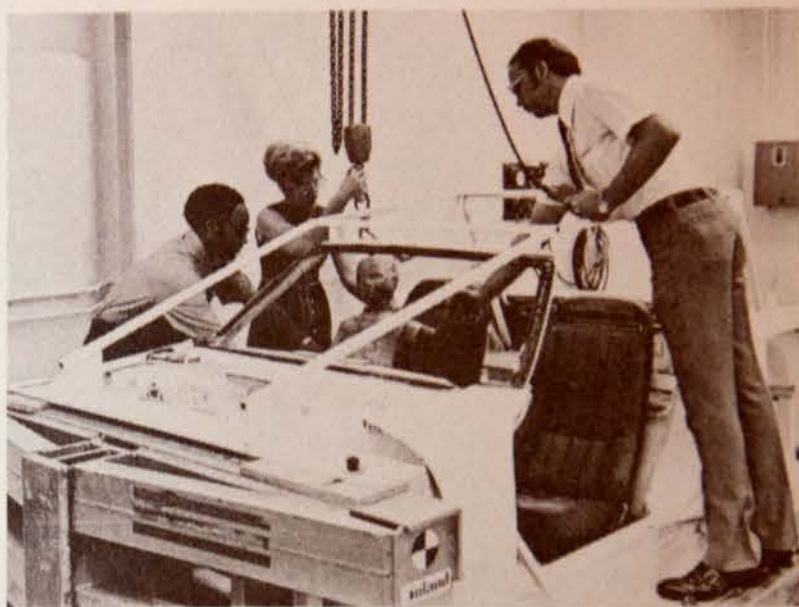


L. C. Wolcott

revolution far different than its makers had planned. It became the villain in a book called "Unsafe at Any Speed" and the great American consumer movement was on.

The whirlwind movement took many forms: Safety, economy, reliability and ecology. It pulled into its vortex such offshoots as job satisfaction and job discrimination.

*Barrier Impact Facility Used To Insure The Safety of Inland Products.*



Coping with these demands while continuing to pioneer and make a profit was the last great challenge in Inland's first 50 years. One way Inland met it was with new thinking.

"We reassessed profit in terms other than dollars," Mathues said. "This means stable employment, fighting pollution, offering jobs in proportion to the demographic mix, making jobs more palatable, dealing better with absenteeism and treating alcoholism and drug abuse as a disease rather than solely as a disciplinary matter."

Then there was job satisfaction. How do you make an employe feel he's important. Inland did it by breaking the total operation down into 11 sub-companies or teams which operate as profit centers with their own funding.

The companies are in charge of generic products: Instrument panel, weatherstrip, ball joints, mounts, steering wheels, brake lining, hose, closed cell sponge, foam seats, flexible body components and ice trays.

"To the extent that we practice this concept, we are unique," Mathues says. "It used to take a young person coming into the company five or six years to feel influential.



### *Inland's Brake Hose Team At Work*

"Under the sub-company program it is not uncommon for those with only a few months experience to get an idea, have it approved, be allocated many thousands of dollars and build it."

Other than new thinking, Inland met the hazards of the Seventies the way it has met every other decade—with new products. On its 50th birthday, chief engineer William Beck saw Inland's mission as: "A continuous program to bring in new or complementary products and a continuous upgrading and adding to the value of existing lines."

A good example would be the Endura bumper, brought out in 1968. The Endura could take sledgehammering and hold its shape. Out of it grew flexible front ends which debuted in 1973. The flexible material is urethane, the same stuff that makes Inland's rapidly growing foam seat business.

And, finally, it is fitting that another product which holds so much promise for Inland on its 50th year is the same one that got it started—the steering wheel.

An important feature of Inland's first wheel was safety. It didn't splinter on impact. A limited - production 1973 wheel carries a far more sophisticated safety feature—an air bag which inflates quicker than a wink on crash and pins the driver safely against the seat.

Over the years, all of Inland's products have not been sensational successes. The popsicles weren't. Inland's were packed in balloons as an extra dividend. A competitor went one step better and gave away dry balloons.

The run-proof silk hose idea didn't set sales records, either. The hose were dipped in latex to keep them from running, and it was a good idea. The problem was that in the summer the Inland hose felt like hip boots.

But the failures are important to remember because they prove a point. What apparently has



*T. O. Mathues Accepts  
Motor Trend Award For  
Endura Bumper*

made Inland different has been the freedom to fail, and try again.

The 50-year history of Inland is much more than a chronology of events. It is a concept which has shaped the chronology more than the other way around. That concept was once expressed by Antheil who put it this way:

"Inland is unique from any other GM division, maybe from any other company in the world because of four basic points:

"Its people are free to work on any kind of metal or polymer—anything that God or man has created.

"Employees have a chance to make their thinking felt. They ask: 'What else can we do with rubber or urethane?'

"Inland always finds a way to do it. Once when they needed steam power, they rolled in a locomotive.

"The company is alert to opportunities. As O'Brien used to say: 'When they pass the cookies, you'd better take some.'"

Sporting a healthy financial glow from 50 years of pioneering, the Dayton manufacturer figures to get its share of cookies for at least 50 more.

## *Chronology*

- 1903—Wright Brothers fly.
- 1908—General Motors' Birthday.
- 1914—Dayton Metal Products starts research on airplane.
- 1917—Dayton Wright Airplane Company incorporated.
- 1917—First contract for military planes.
- 1919—General Motors buys Dayton Wright Airplane Company.
- 1920—Harvey Geyer develops wrapped wood steering wheel.
- 1921—Chevrolet places order for 1,000 steering wheels.
- 1922—General Motors divests Dayton Wright.
- 1923—Inland Manufacturing Company incorporated. Production starts in Dayton Wright Plant No. 3. Wallace S. Whittaker is General Manager. One product — 225 employes.
- 1924—First experiment with rubber steering wheel.
- 1926—First order for rubber wheel. Experiments start on rubber motor mounts.
- 1927—First Inland General Motors Institute co-operative Student enrolled.
- 1928—First running boards.
- 1930—Building No. 11 for running boards, motor mounts. First rubber ice trays.
- 1934—Metal ice tray. Experimentation with plastic.



## *Chronology*

- 1935—Company newspaper formed. Inland Employees' Association organized.
- 1936—Plastic steering wheel. Braided rubber hydraulic hose. Building No. 13 — Main Office started.
- 1937—Spring-type clutch. Name changed to Inland Manufacturing Division.
- 1939—Bondall Company acquired. Inland enters brake lining business.
- 1941—Wallace S. Whittaker leaves to join Army. John D. O'Brien becomes General Manager. Local 87, United Rubber Workers Union, becomes Bargaining Agent.
- 1942—First M-30 carbine produced. GM Suggestion Program started.
- 1951—Building No. 23 for rubber compounding constructed.
- 1953—Building No. 25 for weatherstrips constructed. Latex weatherstrip.
- 1954—Building No. 27 for weatherstrips constructed. Ball joints.
- 1956—Building No. 28 for seat pads constructed. Instrument panel pads.
- 1957—Urethane seats.
- 1959—G. M. Tuition Refund Plan.
- 1961—John D. O'Brien retires. Leslie C. Wolcott becomes new General Manager. Vandalia plant acquired.
- 1962—Building No. 45 for brake lining constructed.

## *Chronology*

- 1963—SAF-WOOD steering wheel.
- 1964—Ice maker. Bulk chemicals.
- 1965—Bucket seats.
- 1966—Building No. 47 for instrument panels constructed. Leslie C. Wolcott retires. Thomas O. Mathues becomes new General Manager.
- 1967—Building 47A for instrument panels and Building No. 48 for Shipping and Receiving are constructed.
- 1968—Endura bumper. Rim blow steering wheel. Experimental impact sled.
- 1969—Pontiac flexible front end.
- 1971—Touch blow steering wheel.
- 1972—Fillers for energy absorbing bumper. Freon Refrigerant hose.
- 1973—Flexible body components.



D



E

A—Main Office, and Engineering-Research Building, Dayton.

B—Plant No. 1, Dayton, Manufacture Steering Wheels, Bumper Rub Strips, Engine and Transmission Mounts, Flexible Body Components.

C—Plant No. 2, Dayton, Manufacture Automotive Latex and Sponge Roof Rails, Door and Deck Weatherstrips, Windshield Sealers, Brake and Refrigerant Hose.

D—Office Building, Vandalia.

E—Plants Nos. 3 and 4, Vandalia, Manufacture Instrument Panel Pads, Seat Pads, Knee Pads, Brake Lining, Brake Hose Coupling, Ball Joints.

*This History  
Was Written By  
James M. Good,  
Business Editor  
The Dayton Daily News*

*January, 1973*