GENERAL MOTORS

builds its first



General Motors Builds Fifty Millionth Car

President Curtice Salutes Co-Workers at Ceremonies Marking Historic Milestone

FLINT, Mich., Nov. 23.-The 50 millionth automobile produced in this country by General Motors rolled off the assembly line of its Chevrolet Motor Division today. President Harlow H. Curtice headed the delegation of

General Motors' top executives who took part in the ceremonies marking the occasion. Chevrolet production employes and representatives from other GM divisions also

"You have achieved a feat air-conditioning, Powerglide that is unique in America's transmission, power brakes, that is unique in interacts transmission, power star entire industrial history, power steering power sear President Curtice told his adjuster, power window fits, listeners. "No one before this electric windshield wipers las even come close to pro- and signal-seeking radio, the diffigure so million target so million the control of the solution o Motors automobile-the total throughout in honor of the

includes trucks and buses as occasion.

well as passenger cars, all All the bright work both well as passenger cars, all All the bright work both built in the United States—is inside and out, including ount in the Omice States—Is made and out, mental a 1955 six-passenger hard-grille, bump doe our top Chevrolet Bel Air Sport and



Unparalleled

This booklet celebrates an event unequalled in the world's industrial history. No accomplishment like the building by Ceneral Motors of 50 million cars has ever before been achieved.

But the building of 50 million cars is far more than a benchmark of production. Above all the achievement signalizes what can be done in an economy that encourages the free exercise of initiative by individuals, the free pooling of resources, the free collaboration of many hands and minds in a common task.

That task has been and continues to be to serve the American customer well; to give him ever better values for his dollar. This booklet attempts to reflect the progress made in this regard between GM cars No. 1 and No. 50,000,000.

It is a tribute to those countless men and women all over America who shared in the job—employes, suppliers of suppliers, dealers and stockholders—who between 1908 and 1954 furnished the initiative, the resources and the cooperation needed.

General Motors' first 25 million cars were built in 32 years. Customers called for another 25 million within 14

Achievement

years. The size of the job grew as the years progressed—and with it the opportunities for all concerned.

Now, as General Motors starts on its second 50 million cars and trucks, the opportunities ahead—for service and accomplishment—are greater than ever before.

/ T.T. Courlies

PRESIDENT



How many are 50 million ears?

If you had a factory capable of turning out one car a minute and you operated it eight hours a day, 40 hours a week, it would take you more than 400 years to produce 50 million cars.

If all the automobiles that General Motors has produced since 1908 were lined up bumper to bumper, they would completely fill a six-lane highway encircling the earth at the equator.

Stretched out in a straight line, they would reach twothirds of the entire distance to the moon.

Obviously these 50 million ears were not built by General Motors alone. They were built by men and women all over America. Who they are, what their contribution has been, are detailed in the pages that follow.





Many Teams Get The Job Done

Building 50 million automobiles was a task that required the cooperative efforts of many, many companies.

A complete list of all the materials needed, from A (for abrasives) to Z (for zinc), would fill several pages. It would include such items as 100 different kinds of steel.

For these many materials, for many kinds of manufactured parts and components, General Motors relies directly on more than 12,000 suppliers. Some are large, more are medium-sized, and many more are small. They may be found in every state, in small communities and in large industrial cities. For example, one may be an electrical manufacturer in Hollywood. California... another a steel mill in Pittsburgh, Gary or Detroit... or a rubber manufacturer in Michigan or Ohio... a textile mill in Chickamauga, Georgia... a glass company in Toledo. Ohio... a lumber mill in



Klamath Falls, Oregon... a small cotton tape manufacturer in Greenville, South Carolina... a tannery in Grand Haven, Michigan... a tack factory in East Jaffrey, New Hampshire ... a machine shop in Old Town, Maine.

But even a tabulated list of all these 12,000 prime suppliers and what they make would only tell part of the story. For these direct suppliers buy from their own suppliers . . . and these second-tier suppliers in turn purchase materials, parts and services from still other businesses. Add thousands upon thousands of suppliers to suppliers—and there is searcely any way to calculate where this chain of participants ends. In one way or another hundreds of thousands of businesses of all types and sizes in every part of the country have helped build GM's 50 million ears.

Take, for example, just two of the many companies that supply goods and services to GM's Deleo Products Division: the Henrite Products Corporation of Ironton, Ohio; and the G.H.R. Foundry of Dayton, Ohio. Henrite Products Corporation, which makes bonded rubber parts used in shock absorbers and electric motors, has 125 suppliers of its own. And G.H.R. Foundry, a Division of Dayton Malleable Iron Company, which makes grey castings for shock absorber





bodies, buys goods and services from 246 separate companies—which, in turn, are supplied with goods and services by still other business firms.

The picture thus is one of an intricate network of productive relationships to get big jobs done efficiently.

Typical is the relationship that has existed between Cleand Graphite Bronze Company and Pontiae Motor Division ever since 1920, the year the Pontiae car was first produced in volume. This supplier makes bushings and bearings. It makes them for other CM divisions as well as for Pontiae, and, of course, for many other industrial customers as well.

"When we started operations, back in 1920," recalls Board Chairman James L. Myers, "there were just 20 people on our payroll. Today we have more than 3,300.

"Since the business was started," explains Mr. Myers,
"we have leaned heavily on research. We take pride in our
new Research Center, with its staff of 350 people. The Research Center alone occupies 15 times as much space as our
entire factory did at the start.

"Our aim has been to build better products, to give better values, to the benefit of the ultimate consumer. We believe we have been successful—and that is why our business has prospered."



Today there are numberless businesses at the stage where Cleveland Graphite Bronze was at the start. They, too, have the opportunity to grow through service.

Consider, for example, the K. William Beach Manufacturing Company of Springfield, Ohio, which began business ten years ago with just two employes—its president and one other worker—and a starting capital of \$1,500. The company at first made seals and gaskets for Delco Products Division. As a result of its successful handling of these requirements, it began obtaining orders from several GM divisions, as well as many other companies. Today the K. William Beach Manufacturing Company has 35 employes and 25 suppliers of its own.

Not only the work but also the rewards of building 50 million cars have been broadly shared. Of each dollar General Motors takes in from the sale of its products, about 50 cents is paid out to its suppliers. They in turn pay out part to their suppliers. Upward of 80 cents of the manufacturing dollar eventually finds its way into pay envelopes, 50 you can see that much of the \$5 billion GM spent for supplies in 1953 represented pay for hundreds of thousands of men and women.

As General Motors begins to build its second 50 million authorities, it confidently expects that its 12,000 suppliers, as well as the many new companies that will join the team in years to come, will grow and prosper with the job they help General Motors do in its competitive effort to give customers the values they want.





A Big Job Takes Many Skills

About 550,000 men and women currently make up GM's immediate working family. During the first year following its establishment, Ceneral Motors had 14,250 employes. One of them was Alfred J. Sedestrom, oiler at Cadillac, where he had signed on in October, 1908. Mr. Sedestrom recently retired from Cadillac as a general foreman after 45 years of continuous service. He now lives in Dearborn Hills, Michigan.

Reminiscing not long ago about his experiences in helping to build 50 million automobiles, Mr. Sudestrom commented on the many changes he had seen. "But what has made the greatest impression on me," he said, "are the many improvements in ways of doing things.

"In the early days, our final assembly line consisted of a row of wooden horses; you laid the frame across them and built your car right on the spot. No wonder cars were so sinfully expensive."

As new and improved tools and equipment were developed, many jobs that once were heavy and unpleasant became lighter, easier and more productive, Mr. Sedestrom recalls.

"In my department back in 1908 a 10-horsepower, one-



cylinder engine was 'broken in' by running it steadily for four hours. Compare that with the mere 15 minutes required to do a much better job of block-testing the modern, 200-plus horsepower engines.

"After the four-hour break-in, we used to tear the engine down and adjust the valves and shafts. Adjustments were made solely by 'feel'. If a mechanic leaned to heavily on his wrench, he was apt to break the part; if he didn't exert enough pressure, an oil leak was apt to develop.

"My particular job required working continuously in hot, dirty oil, which sometimes resulted in infected hands and arms. Today the equivalent job is done better with precision inspection equipment—no more hands in dirty hot oil.

"One result of better tools and methods," as Mr. Sedestrom sees it, "has been a better job for the customer, quality-wise. Those 1908 cars were fair-weather birds. They couldn't take the rugged driving conditions in winter. For that reason the automobile business in those days was extremely seasonal. Lay-offs lasting a couple of months or longer were not unusual. Meanwhile, the factory accumulated a backlog of orders that would make it worthwhile to start up production.

"Another result, of course, has been a truly amazing

increase in what an hour's work will produce. In 1908," Mr. Sedestrom points out, "it took a man eight hours to shape the top half of a gasoline tank with hand tools. Today, three men with a machine do the same job in 20 seconds. No wonder practically everybody can now afford to own a car."

On his first job Mr. Sedestrom earned 15 cents an hour. He worked 50 hours a week for a total weekly pay of \$7.50 and paid \$3.50 for room rent. He either rode a street car to work, or walked. Mr. Sedestrom feels that the changes in pay and hours and employe benefits that have taken place over the years trace right back to the increases in productivity due to better tools and methods.

"I have seen many changes," Mr. Sedestrom commented, "but there are one or two things that haven't changed and won't change. One is that even in the early days, when ears were crude and primitive, the men who built them were proud of them. The men who build cars today have a lot more reason to be proud of their product.

"The other thing that hasn't changed—and I happen to be conscious of it because practically all of my working life was spent in manufacturing—is the need to do a good job for the customer. That's where progress for all comes in, and opportunity."

And that's as true today as GM starts on its second fifty million cars as it was that October day in 1908 when Mr. Sedestrom first went to work for Cadillac.



They Furnished The Tools

The tools and facilities used in producing 50 million cars and the working capital required to operate the business are underwritten by the invested savings of nearly half a million General Motors shareholders.

The great majority of GM's shareholders are small investors, owning fifty shares or less. They include farmers, housewives, teachers, doctors, bankers, engineers, merchants, and mechanics. Millions of other Americans share indirectly in the benefits of General Motors stock ownership through their interest in some 40,000 institutions, insurance companies, corporations and partnerships that are likewise stockholders.

Mrs. George H. Brigham of Tulip Tree Farm, Goodrich, Michigan, is a typical shareholder. She is typical, first,





because among individual shareholders women predominate. She is typical, second, because she is in that largest group whose members own 50 shares or less, and third, she has held her shares quite a few years, like most GM shareholders.

The Brighams have two children: Connic, 17, a senior at Goodrich High School, who plans to make a career of music; Aaron, 14, who aims to follow in his father's footsteps as a farmer. Tulip Tree Farm has been in George Brigham's family ever since 1836, when his grandfather received the original grant to the land from the Federal Covernment, along with a title signed by President Martin Van Buren.

The pleasant New England type farm house is the only dwelling that has ever stood on the property. "It's a real home," says Mrs. Brigham proudly, "and we have lots of good times here.

界

"I decided to invest in General Motors because I have great faith in the future of the auto industry, and especially in this company and its products," Mrs. Brigham explains. "You see, we have always driven General Motors cars, including Chevrolet, Pontine, and Buick. Right now, we're on our third Oldemobile."



Partners In Progress

If production constitutes one side of the modern business coin, then selling surely is the other. This is particularly true of a product as large and complex as an automobile and which represents a major investment for any purchaser.

To find customers for the cars it makes, GM relies heavily on the ingenuity, initiative and reputation of its more than 18,000 dealers.

These dealers are independent businessmen. They employ sales and service personnel totaling well over 200,000.

Each dealer maintains his own salesrooms and service facilities, advertises in the local newspaper, and plays an active part in the business life of his community. Ilis services meet local transportation needs. And the used cars he sells bring individual transportation within the reach of almost everyone in the community.



General Motors takes pride in the fine relationship that has been built up over the past 46 years between its car divisions and their dealers. These dealers are partners in progress.

One dealer who has been with GM almost from the start is Albert Busse, of Busse Motor Sales, Inc., 30 South Main Street, Mount Prospect, Illinois. He obtained his first franchise to sell Buick cars in 1912. He sold 13 Buicks the first year.

hrst year.

Mr. Busse's original "showroom" consisted of a little
red barn. With the profits of his first year's operations he
put up a small garage, into which, by much maneuvering,
he could manage to squeeze eight cars and still find room
to work on one of them.

Since then the dealership has expanded several times. Only last spring Busse Motor Sales, Inc., invested a substantial sum to enlarge, remodel and re-equip its present handsome quarters.

Like other GM dealers, Mr. Busse is keenly aware that his responsibility to his customers only begins with the sale of cars.

"We've got an outstanding product, of course, but that isn't enough. We have to keep them running," he explains. And then he adds: "This business was built on service." Three other Mount Prospect dealers, representing competing







makes, he points out, who were crackerjack salesmen but who neglected to give adequate service on the cars they sold, have long since closed their doors.

At the start, Mr. Busse did all his own repair work.

"I was my own bookkeeper and my own salesman, too," he grins in recollection. "My sole equipment consisted of a hand jack, a peen-ball hammer, a cold chisel, a set of wrenches, a hand-operated grease gun—and a pen.

"It wasn't until 1921 that I could afford to hire a mechanic to help me. I paid him \$25 a week—big money in those days."

Today Busse's service department consists of 28 people.

Thus the growth of this family-owned business son Wilbert Busse now has the franchise—has paralleled that of its partner, General Motors. Both are being paced by the growth of the town which has been rapid in recent years.

More neighbors mean more prospects for Busse Motor Sales, Inc., and more business for Buick as General Motors starts to produce its second 50 million cars.

GM Lives Here

Many communities as well as people participated in the job of building 50 million GM automobiles . . . hundreds, even thousands of places where the raw materials come from; where parts are made and, in particular, GM's own "home towns": the 64 communities in 19 states where GM plants are located.

Not the largest and not the smallest of these is Kokomo, Indiana, the "home town" of Delco Radio Division. Long connected with the automobile industry, this pleasant, tree-shaded city back in 1893 saw Elwood Haynes build America's first commercial car.

But the auto industry, subsequent to its tremendous forward surge during the first and second decades of the 20th century, largely bypassed the Hoosier city. Not until 1936, when General Motors housed its newly formed Delco Radio Division in Kokomo, did the city again come into its own as an automotive manufacturing center.





"It is instructive to reflect," says Kokomo's mayor, Raymon Gilbert, "that right here in Kokomo about 4,000 people are employed making a small accessory for automobiles—car radios—and that the entire autombile industry throughout the country employed only about 13,000 people 50 years ago in 1904. This is a measure of our country's and our community's progress.

"We are proud that Kokomo folks have played an important part in the achievement of the historic milestone that General Motors communities everywhere are celebrating."

And General Motors is proud of Kokomo and the other 63 plant communities, proud to have been a factor in their progress. Kokomo, for example, today is a bustling community that can boast of 38,000 inhabitants and 96 industries. Delco Radio, which manufactures radios for all five General Motors cars and is engaged in important electronics work for defense, is the town's largest employer, providing work for several times the number of people that the old Haynes plants did at their peak.



million cars.

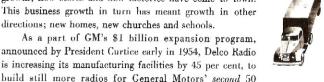




The story in other GM plant communities is basically the same. A company and its products are no better than the people behind them. And what the people are depends on the community in which they live, the educational and recreational opportunities it offers, the cultural and moral environment it provides—all the things that "home town" means to people.



In these respects GM home towns have seen a good deal of progress over the years. In Kokomo, for example, the money Delco Radio employes earn has meant new business growth; new stores and new factories have come to town. This business growth in turn has meant growth in other directions; new homes, new churches and schools.



And from the second fifty million cars there will flow more jobs and more progress to Kokomo and to the other 63 communities of which we are proud to say—CM LIVES HERE.









Only In America . . .

Nowhere on earth, except in the United Suttes do you find a free market large enough to absorb 50 million cars. Only in America do you find the freedom to compete, the incentives to seek new ways of making better products at lower costs that are so important to the mass production process.

America, then, created both the opportunity and the means for this record-breaking achievement. At the same time, 50 million cars have, themselves, had an explosive impact on the country.

The most obvious and dramatic change has been in our new mobility as a nation. Back in 1908 there were less than 200 thousand miles of rural surfaced roads to be found throughout the entire country. Today we have almost two million miles.

The automobile has given us a personal mobility unmatched in any other country. It has made Americans the most traveled people on the face of the globe—and made them better acquainted with each other than any other people.

The automobile has become a symbol of the wide gap that separates the living standards of the average American family from those of people in other lands. For only in the United States do wage earners drive to work in their own cars. And only in America is the farmer able to take his products to market in his own truck.

Trucks are a vital link in moving, at one stage or another, nearly everything Americans eat, wear or use. Nearly nine out of every ten tons of farm products reach their primary market by truck. Buses, too, have helped to revolutionize public highway transportation. School buses now carry one out of every four students to and from school.

But the productive achievement exemplified by the building of 50 million automobiles has had another, perhaps less obvious effect. It was the early production feats of the automobile industry that first proved to the American people that they had a positive genius for doing things in a big way. The spirit and tempo of the Auto Age caught on. Measured by whatever standards you may choose, we have been producing and consuming in a big way ever since.





This development along large-scale lines has given us strength to defend our freedom. In World War II the Motor Capital of the world became the Arsenal of Democracy, Ceneral Motors' plants worked on a full war production basis then, and today they work for defense to the full extent desired by the Armed Services.

More fundamentally and constructively, the nation's potential to the property of the property

Ways of living in the home, too, have been transformed by this never-ending quest for the new and better. Electric refrigeration and air conditioning, and automatic home heating are making life more healthful and pleasant for millions of Americans.

Thus "50 million cars" stands for progress that, in one way or another, has changed the lot of every American for the better.





50 Million Customers Look At Progress

Teddy Roosevelt was completing his second term as President when the first General Motors car was horn in 1908. Gibson girls and "peck-a-boo" shirtwaists were the rage. The Merry Widow was a smash hit in New York.

Jim Thorpe and the Carlisle Indians were making football history, "Take Me Out To The Ball Game" was the top popular tune of the day. And Fred Merkle forgot to touch second.

A man's suit cost \$15; a pair of shoes, \$3.50. Twelve cents would buy a pound of bacon; 24 cents a pound of coffee. And a trolley ride was just a nickel.

Typical of the quality cars of 1908 was the Cadillac Model G "Limousine" pictured on page 26. Equipped with four-splinder 25-horsepower motor, which had to be cranked by hand, this automobile was considered the very some of elegance and ultra-modern design. The inside seat was upholstered in goatskin, and the ceiling was trimmed with satin. It had a cut-glass flower vase, a dome light, and a speaking tube for communicating with the chauffeur on a drafty outside perch. The price, f.o.b. Detroit was just \$3,000, "including three oil lamps and horn."

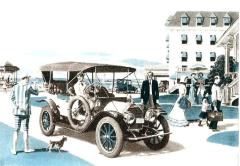
Understandably, the automobile of 1908 was largely a rich man's luxury, a sportsman's toy.





1908 CADILLAC "MODEL G" LIMOUSINE: One of the carriest enclosed cars produced by Cadillac, this model had a four-cylinder, 25-horsepower engine, and a top speed of 50 miles per hour. Wheelbase was 100 inches.

In 1919, the year the Treaty of Versailles ending World War I was signed, General Motors produced its one millionth car. Woodrow Wilson was still President. The prohibition era had begun. Backen Blussoms starred Lillian Gish and Richard Barthelmess, Man O' War was making turf history and people were humming "In My Sweet Little Alice Blue Gown." Alcock and Brown flew the Atlantic non-stop. And the nation's first colored traffic lights appeared in Detroit.





1955 CADILLAC COUPE DE VILLE: For 1955 Cadillac offers three series, all equipped with eight-cylinder, overheed valve, V-type, high-compression engines, I lydra-Matic transmission and power steering, Wheelbase ranges from 129 to 16 9% inches,

By 1919 practically all cars were equipped with handoperated windshield wipers and inside rear-view mirrors. Nine out of ten of the cars built that year were still either roadsters or open touring cars. Motoring had ceased to be just a sport, and touring and family vacation trips were becoming popular.

The 1919 Oldsmobile sedan pictured on page 28 is representative of GM's one-millionth car. It was powered by a 6-cylinder 45-horsepower engine and had a 112-inch wheelbase. An unusual feature for its day was a slanted windshield.

Calvin Coolidge was President in 1926 when the five millionth General Motors car rolled off the assembly line of the newly-formed Pontiae Motor Division. Talking pictures had just made their bow. People were dancing the "Black Bottom." Gene Tunney defeated Dempsey for the heavyweight title that year. Gertrude Ederle swam the English Channel. And Richard Byrd flew over the North Pole.

More and more businessmen, doctors, salesmen and tradesmen were beginning to find the personal transportation provided by the automobile an indispensable aid in their occupations.

By now automobiles had four-wheel brakes, balloon



1919 OLDSMOBILE SEDAN: (Representing GM's 1,000,000th Carl Powered by a six-cylinder, 45-horsepower ongine, it yot 13 miles to the gallon of gasaline. Wheelbase was 112 inches. The slanted windshield was years before its time

tires, and crankease ventilation—all introduced by General Motors one or more years before.

The Pontiac coupe pictured on page 30, representing GM's five millionth car, had rubber engine mountings, automatic ignition control, and fast-drying enamel finish.

General Motors produced its ten millionth car in 1929.

By then women's styles had lost their flapper look. Herbert
Hoover was President; and Eddie Cantor was starring in
Whoopee. The dirigible Graf Zeppelin began regular passenger service between Europe and South America that year.

The "family car" had now become an integral part of the American way of life,

By 1929, nine out of ten automobiles sold were closed models, either coupes or sedans. Car radios, dual tail-lights, and "house" trailers all made their appearance that year.





1955 OLDSMOBILE 98 HOLIDAY COUPE: For 1955 Oldsmobile affers three series, the 88, the Supor 88, and the 98, with a wheelbase ranging from 122 to 126 inches, and a curb weight ranging from 3,663 to 4,016 pounds. All are powered by the famous Oldsmobile V-8 high-compression "Rocket" engine.

General Motors ten millionth car, represented by the Buick Model 27 shown on page 32, was notable for its 74horsepower engine, folding luggage rack, side-cowl ventilation and advanced body styling—which caused detractors to refer to it scoffingly as "the pregnant Buick."

General Motors produced its 25 millionth car in 1940. The population of the United States hit 131 million that year, and the GM Futurana was the star attraction of the New York World's Fair. Hitler occupied Paris and Igor Sikorsky flew the first successful helicopter. More and more homes were finding two cars a necessity, not a luxury.

GM cars by now had all-steel bodies with no-draft ventilation, and the shift lever had climbed off the floor boards onto the steering column.

The 25 millionth car produced by General Motors, a 1940 Chevrolet Special DeLaxe Sedan pictured on page 34, boasted sealed-beam headlights, separate parking lights, vacuum-power shift, one-piece hood, and battery located in the engine compartment instead of underneath the floor boards.



Value Goes Up And Up

Year by year, the value that GM has built into its cars has gone up and up, while the prices that consumers have paid, in terms of other commodities, have gone down and down.

The lowest-priced car in the General Motors line today is an infinitely finer piece of transportation machinery than the most expensive automobile produced as recently as 1929. For example, General Motors ten millionth car, pictured on page 32, had a wooden body, a "soft" top, a 74-horsepower engine. Fuel consumption was 14.7 miles per gallon at 30 miles per hour. The life expectancy of cars in those days averaged perhaps 50,000 miles. By way of contrast, GM's 1955 cars, pictured in these pages have all-steel bodies. Fuel economy exceeds 20 miles per gallon at 30 miles per hour. And these cars have at least double the life expectancy of their foreruners of a generation or less ago.

1926 PONTIAC COUPE: (Representing GM's 5,000,000th Car) This neat little job, the first Pontiac to be built, had a 109%-inch wheelbase, a curb weight of 2,270 pounds, Powerd by a six-ovindory, 36-borsepower engine.



Here is another measure of growing GM values. Based on published prices for farm produce, average rates of factory pay as reported by the U. S. Burcau of Labor Statistics, and delivered-at-the-factory prices of ears, it took 3,100 bushels of wheat, or 15,700 hours of factory labor, back in 1908, to purchase the car pictured on page 26.

But as of the fall of 1954 it required less than 900 bushels of wheat or just under 1,000 hours of factory labor, to acquire a current model Chevrolet—a better car by far than any of the earlier ones pictured in this booklet. Moreover, the "price" of this current-model Chevrolet in terms of wheat or factory work is lower than that of the 1940 Chevrolet, and substantially below that of the 1929 Buick.

Modern mass production methods have, of course, spelled the difference to an important degree. Experts agree that if this 50 millionth ear had had to be produced by the hand methods in vogue back in 1908, its price tag would be not one penny less than \$50,000.

In 1912 a well-known automobile manufacturer advertised: "The car I now bring out is pretty close to finality. I do not believe that a car materially better will ever be built." That statement at the time by a highly respected leader in the industry was made about a car that did not

> 1955 PONTIAC STAR CHIEF CATALINA: Powered by a brand-new Strate-Streek V-8 angine, Pratiac's 1955 models for the first time spart the fimous panaramic windsheld introduced on three GM lines in 1954. The two Pointac series, the Star Chief and tha Chieffain, have a wheeldas of 1/24 and 122 inches, respectively.





even offer such rudimentary conveniences as a top or windshield as standard equipment.

Harlow H. Curtice, President of General Motors, has said: "We regard doing a good job for customers as our foremost responsibility. This responsibility guides us in everything we do."

Improvements in General Motors cars tend to be evolutionary, rather than revolutionary. Yet in recent years the evolutionary process has made such rapid strides that the products of today represent incomparably better values for customers than do their predecessors just a few years back.



GM Pioneers Engineering And Design Advances

Back in 1910 General Motors introduced the first closed bodies for volume production. This major GM advance was followed by another significant one in 1911, the self-starter. The self-starter saved male drivers countless broken arms. Also for the first time it freed women motorists from their dependence on a chauffeur.

Other milestones of GM engineering progress include: the first V-type, eight-eylinder, high-speed engine (1914), tilt beam headlights (1915), four-wheel brakes (1923), crankcase ventilation (1925), synchro-mesh transmission (1928), Super safe headlights (1932), Fisher No Draft ventilation (1933), Knec-Action wheels (1934), Turret Top bodies (1935), Hydra-Matic drive (1939), high-compression, V-8 engines (1948), Dynaflow and Powerglide torque converter transmissions (1948 and 1950).

Many of these advances were designed to improve safety. Others, aimed primarily at better performance, likewise have paid important safety dividends. For example, GM's modern high-compression engines make for better maneuverability, thus giving the driver a better chance to

> 1955 BUICK ROADMASTER RIVIERA: All four series in the Buck 1955 line, the Special, Century, Super, and Roadmaster, have the famous new Huick Freshil appt. cylinder, Vyrge, tight compression engine. Wheeltase ranges from 122 to 127 inches.





1940 CHEVROLET DELUXE SEDAN: (Representing GM's 25,000,000th Carl Vaccuum-power shift, sealed-beam headtlights, and one-piece hood were features of this model. With its six-cylinder, 85-horsepower engine, this Chevrolet got 21.9 miles to the gallon.

extricate himself from trouble spots. Safety has been improved, too, by vastly increased knowledge of materials—steels, alloys, rubber—and how to use them.

In styling GM has long been the leader. The infant automobile was little more than a motor mounted on a four-wheeled platform, with a perch for passengers. General Motors designers took the automobile out of the buggy-with an-engine class and transformed it into the selse, comfortable, eye-pleasing, and amazingly efficient machine for transportation that it is today. They made the old carriage lamps an integral part of the car body. Windshields, at first straight up-and-down, relaxed into casual symmetry, and finally developed into the full-view panoramic windshield of today. External door hinges disappeared, along with runningboards, as cars green longer, lower, trimmer. Interiors, too, grew





1955 CHEWROLET BEL AIR SPORT COUPE: For 1955 Chemolar offices less oparatio acrise a form, one agripped with the parallel Chemolar Street, planter in line engine, and one powered by the transfer to the Technology of the Chemolar Street, planter in line engine, and one powered by the transfer to the Technology of the Chemolar Street, and the Street Street Chemolar Street Street Street Chemolar Street Street Chemolar Street Street Chemolar Street S

safer and more comfortable: floors, sides and dash were cleared of protuberances; and seats, moved forward for greater ease of riding, were made adjustable and shaped to fit the body contours of passengers, rather than passengers being forced to adjust themselves to fit the seats.

Since World War II the rate of improvement both in engineering and in styling has been even greater than before. Today's General Motors cars are not only more appealing to the eye, better performing and more economical than ever before, they are also safer, more comfortable and easier to handle. Power brakes, power steering, power window lifts and seat adjusters, automatic headlight dimmers, and all-weather air conditioning are conveniences and safety features available to GM customers. The new "wrap-around" panoramic windshields, now standard on all General Motors models, have increased driver visibility by as much as 19





The Next Fifty Million ...



So much for GM's first 50 million cars. What will the next 50 million be like?

No one knows. But it is safe to assume that they will surpass—in styling, comfort, safety, and performance—anything that we now are able to envisage.

Reality, here in America, has a curious habit of outdistancing our fondest dreams.

Improvements are coming at an ever-faster pace. We are in the swing of a tremendous advance in technology—an upswing for which the automobile itself in no small measure is responsible. This means a further shortening of the time interval that is required between the conception of a new idea and its final maturity as a product that people generally can use.

Back in 1940 when GM's 25 millionth car was produced,

millions of Americans visited the New York World's Fair to gaze in wonderment at the projected World of 1960, as presented by General Motors in its now-famous Futurama. Many who saw the exhibit were heard to scoff unbelievingly that such innovations couldn't possibly be achieved within their lifetime—if ever

The 1960 date is still five years off. Yet many of the marvels predicted by the Futurama for then—including super highways, moving sidewalks, double-deck city streets, and glass-sheathed office buildings—have already become realities. So have many other marvels, such as radar speed controls and atomic power plants, that nobody even dreamed of in 1940.

General Motors has invested heavily in the future. Last January President Curtice announced a \$1 billion expansion program for this year and next, to increase and improve CM's production facilities, the better to cope with future needs of customers. This was in addition to the \$2 billion for capital improvements that the Corporation had already expended since the close of World War II.

Plants and machinery alone are not enough. It takes people to create the future. That is why General Motors has invested heavily in an elaborate employe-training program—a program which currently is helping thousands of young men and young women fit themselves for positions of increased responsibility tomorrow.

At the General Motors Institute in Flint, Michigan, for example, some 1,900 student engineers are learning the





fundamentals of automobile engineering and construction. One or more of them may contribute to the basic design of General Motors' 100 millionth ear—the car that you yourself are likely to be driving, if not tomorrow then the day after.

To improve still further the service that dealers will be able to offer on GM's next 50 million cars, another type of educational program was recently inaugurated. This is a network of Service Training Centers, located at strategic points throughout the country.

With the unprecedented increase in the number of General Motors cars and trucks in operation, keeping them in the best possible running order has become a matter of prime importance. The new Service Training Centers provide staff and facilities for instructing dealer mechanics and other dealer personnel in the most up-to-date techniques of servicing all CM lines—including maintenance, repair, and overhaul operations.

On an 819-acre tract northeast of Detroit a group of buildings unique in appearance as well as purpose is rapidly taking shape. This is the new General Motors Technical Center—"the nerve center of our long-range efforts to accelerate our technological progress," as President Curtice has described it. The Technical Center alone represents a substantial investment by GM in the future. For these ultra-modern buildings, some already occupied, ultimately will house the General Motors Research Laboratories, as well as the central Engineering, Styling, and Process Development Staffs of the Corporation. All these activities are exclusively concerned with the task of looking ahead to determine what GM should make, and how it should be made tomorrow. On their drawing boards are ideas for vehicles so advanced as to have been considered utterly fantastic five years ago. Other cars, on which work has progressed further, are already being tried out on GM's proving grounds, totaling upwards of 6,000 acres, a Milford, Michigan, and Phoenix, Arizona.

As these prototypes develop into realities General Motors' customers will be still better served, will get still greater value for their dollars.

Employes . . . suppliers . . . dealers . . . shareholders . . . the communities where GM plants are located . . . and the country as a whole . . . all will contribute to the task and share in the benefits, as General Motors continues to dedicate itself to its everlasting goal of providing "More and Better Things for More People."



CHEVROLET - PONTIAC

OLDSMOBILE - BUICK - CADILLAC

With BODY by FISHER

GMC TRUCK AND COACH

