Is it possible to foresee what life will be like five, ten, twenty-five years from now?

This much we know:

Much of what is to happen can be foretold from what has already taken place.

At the 1933 Century of Progress Exposition, the Old is contrasted with the New, in art, architecture, and dress—in chemistry, physics, medicine, and electricity—in biology, botany, agriculture, and food—in education, music, amusements, and sports—in communication, transportation, manufacturing, tools, and machines—and in a myriad of other interests.

But much more, too, is accomplished. Here, to a degree never before attempted, historians, scientists, engineers, and architects have crystallized in stone and steel—in miniatures and life-size models—accomplishments of TODAY that constitute a reliable prophecy of much of the progress that may be expected in the future.

Where previous world's fairs derived their inspiration from history and looked backward, this exposition finds its inspiration in ACHIEVEMENT and looks forward. Minds young enough and bold enough are here able to find the pathway beyond the greatest frontier man has yet confronted—the frontier of inadequate conveniences, comforts, and luxuries. This fair points the way to the settlement of this frontier with today's new materials, processes, methods, equipment, and technique of progress.

The century that started with the invention of the reaper and the birth of Chicago has brought forth man's greatest progress in discovering and utilizing the resources of nature for his own purposes. The challenge of today is in the spreading of these benefits among the masses of the world's people.

Only an exposition world-wide in scope and forward-looking in purpose can interpret this spirit adequately. It is fitting that Chicago, one hundred years old this year, mistress of the inland empire, aggressive 'I Will' metropolis of the Middle West, and itself the birthplace of many of the contributions to humanity's advancement, should be the interpreter of the progress that has been made and will continue to be made in the years to come.

INTERNATIONAL HARVESTER COMPANY
(INCORPORATED)
600 S. MICHIGAN AVENUE
CHICAGO, ILL.

Agricultural Building at A Century of Progress, containing the main exhibit of the International Harvester Company.
Partial view of A Century of Progress exhibit of the International Harvester Company, occupying the North Wing of the Agricultural Building on Northerly Island. The space at the left contains a replica of the 1831 McCormick Reaper, as well as models of the machines that succeeded it, and six dioramas (three-dimensional pictures) of the evolution in agriculture. Today's mighty monarch of the harvest fields, the harvester-thresher, is

the center of the exhibit. The north half of the exhibit space is occupied by International trucks. Besides this exhibit, International Harvester also displays, in the Travel and Transport Building, the contrast between the old and the new in truck transportation and tractor development. International Harvester machines are demonstrated in actual field operation on an outdoor display ground just south of the Travel and Transport Building.
Before 1833--

Suppose this were the year 1833 and you were living on a farm, as four out of five people in the United States were at that time. Tomorrow morning, after a night spent on a straw mattress, you would get up at an early hour, pull on moccasins and homespun clothes, start a wood fire to cook breakfast, carry in water from the well, and begin a day of dreary routine, the like of which few of us know anything about today. You would have almost no money to spend, for practically everything you could produce would be needed to feed, house, and clothe yourself and the family.

Besides ordinary housework as we know it today, the routine of the women of your household would include making the clothes, skimming the milk, churning the butter, baking, tending the chickens and the vegetable patch, dipping the candles, milking the cows, and sometimes helping the father with field work in case there were not enough sons.

In that day there were no telephones, telegraph, radios, or cables. No electric lights, sewing machines, ice machines, pasteurization, safety razors, or modern plumbing. No steel plows or barbed-wire fences. No gasoline, gasoline engines, automobiles, or vulcanized rubber. No dynamos, steam hammers, dynamite, bandsaws, riveting machines, pile drivers, I-beams, steel castings made to pattern, case hardening, acetylene, hydraulic presses, steam turbines, electric welding, or stainless steel. No passenger elevators, suspension bridges, or airplanes. No revolvers, cartridges, or machine guns. No steel pens, typewriters, carbon paper, shorthand, adding machines, dictaphones, or linotypes. No cameras, phonographs, or movies. No X-ray, anaesthetics, or dental bridge work.

The list could be prolonged. The point of importance is that even if these commonplaces of today had been available a century ago, there would have been a very limited market for them.

America in 1833 was at the crossroads. It was favored with millions of undeveloped fertile acres, unlimited natural resources, a variety of climates, and a hardy stock of pioneers whose free government suited their bold ambitions. Yet their pent-up hopes were chained to the soil. Urban population was confined chiefly to the seaboard. New York, Philadelphia, Baltimore, Boston, New Orleans, and Charleston were the only cities worthy of the name. The land beyond the Mississippi was largely undeveloped, uncharted—almost unknown.
Between the War of 1812 and the time when railway construction began on an extensive scale (about 1841), very few authentic maps of the United States were made. This map, prepared after considerable research and displayed at A Century of Progress, is available in colors in a size 19 x 26 inches suitable for class-room use and similar purposes. Copies may be obtained free of charge from the International Harvester Company, Room 702, 606 South Michigan Avenue, Chicago, Illinois.
The Reaper--

Wheat must be cut when it is ready to cut—in a few weeks' time at the most. The amount of grain a farmer can produce depends upon the speed with which he can do his harvesting. Before 1831 the most wheat a man could cut in a day with a cradle, the most efficient harvesting equipment known, was about two acres. Hundreds of inventors had attempted to build a machine that would solve the problem. The files of the patent offices contained many detailed drawings of unsuccessful reaping machines.

Then, in July, 1831, a machine invented by Cyrus Hall McCormick moved down a Virginia field cutting a swath of wheat! In six momentous weeks, this 22-year old young man had built a machine that worked. It could cut only 8 or 10 acres a day, but it established the basic principles which showed how a grain-cutting machine should be built. Today, the harvester-thresher, direct descendant of the McCormick reaper, cuts, threshes and cleans the grain from 40 to 50 acres a day—two men now doing in one day what would have required 160 to 200 men before 1831.

With quicker harvesting came larger farms. Larger acreage brought improvements in plowing, harrowing, and planting. The combination of these machines released men from farm labor to work in other industries. With more mouths to be fed in the cities came a need for greater production per farm—of both grain and meat. As the country-to-city trend increased, there came a procession of implements for all farm work.

Reproduction of a painting showing young McCormick at work on his Reaper outside the farm forge shop on the old McCormick homestead, near Steele's Tavern, Rockbridge County, Virginia.
The city people had to be fed and the farmers fed them—and received money for their labor that enabled them to buy the products of industry. This created a commerce that brought the railroads, banks, exchanges, and retail and wholesale trading that today supports two-thirds of the nation and keeps all the nation housed, heated, clothed, fed, and amused.

The United States could not have developed without the steamboat, the railroad, and the telegraph. It still would be largely a land of promise rather than fulfillment if it had not been for the genius of Whitney, Henry, Howe, Morse, Goodyear, Edison, and a host of other inventors who have emblazoned the path of modern civilization. Most of their efforts, however, would have borne little fruit had it not been for the release of men’s thoughts, time, and labor through the medium of the reaper. In many instances the hopes and ambitions of the inventors themselves would not have been realized had it been necessary for them to spend most of their waking hours in back-breaking farm labor. And even if they had been able to perfect their inventions, little could have been accomplished in the way of manufacture and distribution if it had remained necessary for four out of five people to live on farms.

Viewed in retrospect, the past century demonstrates that progress depends, in large degree, upon a release from drudgery and routine tasks that require little mental activity. The people in 1831 needed a quicker, easier method of producing wheat, their main food requirement. When this was provided, greater progress resulted in a few years than previously had been possible in many centuries. Railroads were necessary to market wheat cheaply, iron was necessary for building reapers and railroads, cheaper paper and printing for the spread of information and education, the telegraph to expedite exchange, and other labor savers to give people necessary leisure. All were dependent upon one another. The startling thing is that the vast majority of them followed the others so closely after McCormick perfected the reaper. The world waited centuries for the progress of events that started with that memorable invention in 1831.

McCormick’s first factory, built in Chicago in 1847, just east of the present Michigan Boulevard bridge.

Cyrus Hall McCormick
1809-1884
Inventor of the Reaper
Model of McCormick Hand-Rake Reaper of 1831. This reaper contains seven basic principles still used on grain harvesting machines today—repeating knife with serrated edge, fingers or guards, revolving reel, platform, master wheel, side hitch, and divider.

Model of McCormick Combined Reaping and Mowing Machine of 1860 (as a mower). Commercial production, 1857-65. To convert the reaper into a mower, the platform, reel, and reel supports were removed, and a special grass knife was substituted for the grain sickle.

Model of McCormick Hand-Rake Reaper of 1847. Experimental stage, 1846. Commercial production, 1847-48. Notable improvements over the original reaper were the addition of a seat for the raker and improvements in the cutting apparatus, reel, divider, and platform.


Model of McCormick Combined Reaping and Mowing Machine of 1857 (as a reaper). Commercial production, 1857-65. By 1849 a seat had been added for the driver, and in 1851 a sickle made in sections replaced the straight knife. The gearing was rearranged to balance the weight of the driver.

Model of McCormick "Daisy" Reaper of 1898. Experimental stage, 1891. Commercial production, 1892-1902. The rakes not only held the standing grain against the cutter bar but also raked the cut grain from the platform in any size gavel desired. The platform and rakes could be folded for passing through a gate.
Model of McCormick Hand-Binding Harvester (Marsh Type) of 1878. Experimental stage, 1858-74. Commercial production, 1875-85. Consisted of the McCormick platform and cutting apparatus combined with the Mash-type moving canvas elevators and hand-binding platform.

Model of McCormick Harvester and Wire Binder (Withington Type) of 1881. Experimental stage, 1872-76. Commercial production, 1877-82. Consisted of the McCormick Harvester with the automatic wire-binding attachment substituted for the hand-binding platform.

Model of McCormick Harvester and Twine Binder (Appley-Graham Type) of 1885, the prototype of today's binder. Experimental stage, 1875-80. Commercial production, 1881-85. Consisted of the McCormick Harvester with the automatic twine-binding attachment replacing the hand-binding platform.

Seventeen colored transparency pictures in this Century of Progress Binder Twine exhibit show the process of binder twine manufacture from the young sisal plants on the International Harvester sisal plantation in Cuba to the finished product. Colored pictures of the six International Harvester twine mills are shown below the transparencies, as well as a twine can from a binder, cut away to show how the balls, with their non-collapsible cover, fit snugly in the can until all the twine is used. Pillars of twine balls and samples of fiber are at each side of the exhibit.

**Binder Twine**

*When* the twine binder was perfected in 1881, no manufacturer was equipped to produce twine in the quantities needed. Much money was lost experimenting with twine made of grass, hemp, straw, paper, and later of flax. Flax did a satisfactory job of binding but, unfortunately, was much relished by grasshoppers.

Finally, however, the making of twine became standardized. Today most of the fiber for International Harvester binder twine comes from the sisal plant grown extensively in the state of Yucatan, Mexico, as well as in Cuba, East Africa, Java, and other tropical countries. Sisal is a part of the henequin plant, some types of which are known as century plants because of the great age they attain. Manila fiber, also used extensively, comes from the Philippines.

It takes about one-sixth of a mile of twine to bind the grain crops consumed by the average American in a year. International Harvester's six twine mills have a capacity of more than 100,000 tons a year—McCormick Twine Mill, Chicago, 31,500 tons; New Orleans Mill, 18,500 tons; Hamilton, Canada, Mill, 15,000 tons; Croix, France, Mill, 24,000 tons; Neuss, Germany, Mill, 11,000 tons; Norrkoping, Sweden, Mill, 4,000 tons.
Harvester- Thresher--

Before the invention of the McCormick reaper a little more than a century ago two men would have had to work hard for a hundred days to harvest and thresh as much grain (50 acres) as two men operating a modern 16-foot harvester-thresher now can harvest and thresh in one day.

Before 1831 it would have taken two men 25 days just to harvest 50 acres—one man cutting the crop with a grain cradle while the other bound it and set the bundles in "shocks" to keep them dry.

It then would have taken these two men a week or ten days to load the bundles with pitchforks onto a wagon, haul the crop to the barn, and unload it. And it would have taken them more than two months to beat the grain from the straw by means of flails and winnow the grain by tossing it in the air and fanning away the chaff.

With a modern harvester-thresher, two men now can cut, thresh, and clean the grain from 40 to 50 acres in a day. They can do more and better work in ten hours than they could in three months by the hand-labor methods of a century ago. The cost is less than half the expense of using binders and thresher, and the yield usually is increased about 10 per cent because of the reduced loss from shattered grain.

McCormick-Deering harvester-threshers are made in 8, 10, 12, and 16-foot cutting widths. The machine displayed at A Century of Progress collects the threshed grain in a 45-bushel tank, from which it can be unloaded conveniently into a truck. A wagon loader or a bagging attachment can be used if desired. The straw is spread evenly on the ground behind the machine, thereby returning valuable plant food to the soil.

When equipped with a pick-up attachment, it will gather grain in the windrow—a method frequently followed where grain ripens unevenly or where green weeds are numerous.

A wide variety of special equipment is available for harvesting crops such as soybeans, sorghum grains, flax, peas, beans, alfalfa and clover.
Farmall Cultivator—

Until a century ago the common method of killing weeds and stirring the soil between crops planted in rows was either to hoe the crop by hand or to drive a plow or similar implement between the rows. The "sulky" or riding cultivator that "straddled" a row, cultivating both sides at once, was a development of the fifties when the advantages of larger-scale farming became possible through the use of the reaper. The two-row horse-drawn cultivator first appeared on the market in the first year of the twentieth century.

The introduction of the Farmall tractor in 1922 made it possible, for the first time, to use tractor power for cultivating. The Farmall four-row cultivator (No. 407-A) displayed at A Century of Progress can be used in corn, cotton, or any crop planted in rows 38 to 42 inches apart. Two-row Farmall cultivators also are used extensively as well as four and six-row Farmall cultivators for beets, beans, and other narrow-row crops.

With a Farmall four-row cultivator, one man can cultivate from 30 to 65 acres a day. He can do 15 to 20 times as much work as was possible with a one-horse cultivator of a century ago and do it much better.

The shovels that are close to the plants are located ahead of the tractor operator where he can watch the work they do and control the cultivating depth. Turning the steering wheel not only changes the direction of travel of the tractor but also automatically shifts the front shovels. This double-quick shift permits extremely close, accurate work in crooked rows.

The Farmall turns in a radius of only eight feet, thereby saving time at the ends of rows and making it possible to work very close to fences. Power from the tractor is utilized to lift the shovels at the ends of rows.

Loud speakers, controlled by this machine, are concealed in each of the principal International Harvester displays in the Agricultural Building. These speakers can operate one at a time or all together, and transmit messages from disk records, radio programs or spoken messages delivered in this room.
**Corn Picker--**

The perfecting of machines to harvest corn is an accomplishment of the present generation. Until recent years, the crop has been harvested almost entirely by hand in much the same way as when white men first learned about corn from the American Indians.

A corn picker of the type displayed at A Century of Progress picks the ears from two rows at a time, removes the husks, and elevates the ears into a wagon drawn behind the tractor. It gets all the corn, even when the stalks are down and tangled, and picks as much in one day as a man usually picks by hand in two weeks.

McCormick-Deering corn pickers are made in one and two-row sizes and in two styles—either direct-connected to a Farmall tractor or pulled behind a tractor. All McCormick-Deering pickers are power-operated from the tractor engine and can be removed easily so that the tractor can be used for other work. One-row pickers may be equipped either with an elevator for delivering the husked corn into a wagon or with a tank having a capacity of 25 bushels of husked corn.

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**Enclosed Gear Mower--**

The Enclosed Gear-Mower (No. 7) displayed at A Century of Progress is an example of the many improvements in farm machine construction made possible in recent years by new methods of manufacture. The gears, clutch, and differential of this two-horse mower are grouped together compactly in a dust-tight compartment and operate in a bath of oil. This mower sets a new standard for durability and quiet operation. One filling of oil usually is sufficient for an entire season. The wheels are keyed solidly to the axle—no wobble or end play. The two-piece main axle revolves in roller bearings which are automatically oiled from the main oil supply. This mower is made in 4½, 5, 6, and 7-foot cutting widths.
This forty-foot map of the world, one of the largest world maps ever constructed, is painted on the wall of the half dome at the north end of the International Harvester exhibit in the Agricultural Building. The areas served by the International Harvester organization are colored in orange (shown in gray in this illustration). The locations of 527 IHC and jobber branch houses are studded in these areas by brilliant jewels. The locations of International Harvester factories and raw material properties are identified by electric bulbs. Large pictures of International Harvester factories in natural colors are grouped at each side of the map. Below the factory paintings are two automatic stereopticon machines, one of them showing seventy colored pictures of International Harvester properties and the other showing pictures of seventy different International Harvester products.
Cotton Picker—

Cotton is the only major crop still harvested almost entirely by hand. In recent years cotton stripping machines have been used successfully in the dry regions of the Southwest where short-staple cotton is grown. These machines, however, strip large quantities of dry stems, leaves, and dirt from the plants and are not practical for use in the more humid sections where long-staple cotton is grown and where the bolls ripen unevenly.

Inasmuch as cotton can be planted four rows at a time with a Farmall as shown here, and therefore cultivated with a 4-row Farmall cultivator, it is expected that as soon as the cotton picker is perfected the entire work on the crop, from seed-bed preparation to harvesting, will be accomplished with low-cost Farmall power.

Inventors have been trying for more than eighty years to perfect a cotton-picking machine. The machine displayed at A Century of Progress represents the present state of engineering progress in a mechanical picker as developed by Harvester Company engineers after thirty years of experimentation. Picking two rows at a time, it removes the ripe lint from the plants by means of 960 revolving spindles, each of which has numerous tiny hooks, or barbs, that catch the lint. These spindles protrude horizontally from two large vertical cylinders, one on each side of the machine. The cylinders revolve slowly, rolling the spindles gently into the plants, thereby avoiding tearing or bruising the stems or leaves. The cotton is removed from the spindles by brushes that travel about ten times as fast as the spindles. The cotton then travels to a cleaner where vibrating grates and pick-up cylinders remove the leaves, dirt, and trash.

As now designed, the cotton picker can pick the cotton from twelve or more acres a day. If the field yields a bale of lint cotton to the acre, or 500 pounds, the machine will pick 3,000 pounds a day, even if it has to go over the field twice to get all the crop. It is estimated that the machine will do the work of 16 to 48 hand pickers, depending upon the yield and condition of cotton.

Further testing and experimental work is being carried on to perfect this cotton picker before manufacturing it in quantities and offering it for sale.

Ripe cotton is picked from the plant by 960 of these revolving spindles. Notice the rows of hooks, or barbs, that engage the cotton. Fast-traveling brushes remove the cotton from the spindle hooks.
Dairy Equipment--

Up to the last quarter of the nineteenth century, cream was separated from milk by letting the milk stand for several hours until the cream rose to the surface. The cream then was skimmed off painstakingly with a skimmer or pan. Today the centrifugal force of a cream separator bowl, turning about 8,300 revolutions a minute, does the job in short order and enables the farmer to obtain practically 100 per cent of the cream contained in the whole milk. The cream is more sanitary. There are fewer vessels to store and keep clean and the skimmed milk can be fed, while still warm, to hogs, calves, and other animals on the farm.

The use of a milking machine is a more recent development. With this machine it is possible for a farmer to milk more than twice as many cows as could formerly be milked by hand in the same time, and the work is very much easier. In addition, a milker frequently results in a greater production of milk per cow, due to the cows always being milked in the same way, with the same steady manipulation, and always being milked thoroughly. Rubber-lined cups placed over the teats of the cow pulsate at intervals by means of suction created by a vacuum pump and controlled by a pulsating device located on the milk-pail cover. The alternate suction and release, giving a gentle, stimulating, massaging action, is very similar to the natural suckling of a calf. The milk at no time comes in contact with human hands or the air of the barn and the dust, odors, and insects most stables contain. McCormick-Deering milkers are either of single or double-unit variety, depending on whether it is desired to milk one or two cows at the same time.
At the left of the cow three different sizes of Cream Separators are displayed as well as a cream separator with the interior mechanism exposed to view.

At the right of the cow is this wax man in a dairy room fully equipped with a McCormick-Deering Cream Separator, a milker Power Unit, and a Solution Buck for keeping the rubber parts of McCormick-Deering milkers sterilized between milkings.

McCormick-Deering Engine as displayed at A Century of Progress. The cylinder sleeve is replaceable, assuring the engine many years of useful life.

McCormick-Deering No. 1-A Hammer Mill as displayed at A Century of Progress.

The Hammer Mill (No. 1-A) displayed at A Century of Progress is used for grinding wheat, oats, barley, rye, shelled corn, ear corn, Kafir corn, milo maize, heggari, feterita, corn stalks, hay, alfalfa, beans, peas, grain sorghums, both headed and in the bundle; also whole cotton seed, cotton seed cake, and various roughages. Operated by belt connection to a tractor, it enables a tractor owner to do this work at a big saving compared with what it would cost him to hire it done.

The 3-Horsepower Engine displayed at A Century of Progress further exemplifies the progress that has been made since motors displaced muscles as the source of power on American farms. McCormick-Deering engines, built in four sizes—1 1/2, 3, 6, and 10 h.p.—operate feed grinders, pumps, water systems, saws, light plants, sprayers, concrete mixers, corn shells, silo fillers, grain elevators, fanning mills, hay balers, hay hoists, milking machines, cream separators, churns, cider presses, washing machines, grindstones, animal clippers, and many other machines. They do this work for as little as two or three cents an hour.
The new McCormick-Deering Farmall-12 Tractor as displayed at A Century of Progress. Farmalls now are built in one-, two-, and three-plow sizes.

**McCormick-Deering Tractors**

International Harvester experience with internal-combustion engines dates back nearly two score years. It was a natural evolution for builders of farm machines, with many years of experience behind them, to pioneer the development of the new motive power which the invention of the gas engine provided.

International Harvester developed a tractor for plowing as early as 1906. It pioneered the development of the two-plow and three-plow types of four-wheel tractor that played an important part in maintaining adequate food supplies during the World-War period. It introduced a successful "power take-off" for utilizing the power of the tractor engine in driving the mechanism of pulled machines. It perfected the Farmall type of tractor with regulation-size rear wheels, small front wheels close together, and a high axle clearance, to enable it to straddle the rows of growing crops—the tractor that does all farm power work from plowing, planting, and cultivating to harvesting and the operation of silo fillers, feed grinders, and other belt-driven machines.

Since the introduction of the Farmall tractor eleven years ago, thousands of American farmers have dispensed with horses entirely. Besides doing their work more quickly and saving money on hired labor, they have rid themselves of the onerous routine of being on the job every day, morning and night, to feed, bed, and water their motive power. They feed their tractors only on the days they are at work. They house their tractors in a small fraction of the space the former power and its feed required. The time they save enables them to increase greatly the volume of work the same amount of labor can accomplish—by farming more acres or by conducting increased livestock enterprises, or by both.

In 1850, at about the time the McCormick reaper began to be used extensively, the farms of the United States possessed a primary power plant of about 6½ million horsepower. By 1900 this had
International Harvester Tractors exhibited in Travel and Transport Building. The 1906 model on the left was used continuously for sixteen years. The modern Model I-30 industrial tractor on the right, although smaller in size, develops nearly four times as much power and has removable cylinders, a thermostatically-controlled cooling system, impulse starter, enclosed gears, one-piece main frame, and 27 ball and roller bearings.

grown to 23½ million through an increase in the number of work animals. In 1930, because of the extended use of tractors, this had grown to 65 million horsepower. Since 1924, largely because of the Farmall tractor, the increase has been at the rate of about 3½ million horsepower a year—more than ten times as fast as during the last half of the nineteenth century. Agriculture in America today possesses more power than all the factories in the country.

A Century of Progress year, 1933, marks an important milestone in agricultural history, for this year a new small type of one-plow Farmall tractor has been introduced on American farms. It is of the same general design as its big brothers of two-plow and three-plow capacities, yet it is scaled down in power to meet the requirements of farms of less than 100 acres, and to serve as an auxiliary power on larger farms.

A section of the International Truck exhibit in the Agricultural Building. The three trucks shown here are, left to right, a 5 to 7½-ton coal truck with dump body, a 3-ton truck with gasoline tank body, and a 2-ton truck with a cab and stake body. The dump body is raised and lowered continuously while on display. Recessed in the wall on each side of this section are motion pictures showing International Trucks operating under a multitude of difficult hauling conditions.

International Trucks--

The Harvester Company began its work as an automotive pioneer in 1899. Even then it had had nearly seventy years of experience with heavy-duty machine manufacture. It had already contributed much to the greatness of America when the internal-combustion engine was born.

Today International Harvester ranks first among all full-line truck manufacturers. Its service to transportation extends far beyond the agriculture it first served. Three-fourths of its annual truck output is absorbed by commerce and industry.

In the ten years from 1919 to 1929 International truck production increased sevenfold, while the total production of the truck industry was only doubled. In subsequent years International Harvester's share of yearly volume in trucks has risen steadily.
The new Model D-1 International half-ton truck and the new International Model M-2 for house-to-house delivery as displayed at A Century of Progress. In the foreground are International heavy-duty dual rear springs.

The long life and dependable, low-cost performance of International trucks are the result of constant effort to do a difficult thing well. The International product is all truck—truck from the ground up.

No engine builder in the world has done more in the development of fuel carburetion and in the refinements of proper engine operation than International Harvester. No manufacturer has contributed more to the application of modern metallurgical science. The laboratory research and experimental work of this Company have been a most important factor in the progress of transportation.

Supplementing its advanced engineering and modern methods of quality manufacture, the Harvester Company has established a tradition of service to the truck user that has been a significant contributing reason for the present high reputation of International trucks. More than twenty years ago the International Harvester Company conceived an ideal of motor truck guardianship, the full meaning of which was entirely new to the automotive industry of that early date. Even then generations of experience had taught the Company the importance of service to its own development and to the welfare of the customer.

Today International Harvester maintains the largest Company-owned branch organization in the world to safeguard truck owners, to reduce truck upkeep to a minimum, and to keep Internationals everywhere profitably on the job. In each of these branches the International truck user finds the same modern methods, tools, and equipment; the same work benches; the same alert and orderly operation; the same service apparel on a uniformly high type of skilled personnel.

Truck owners know that when they operate Internationals over a wide territory it is not neces-
Power plant for 2- and 3-ton International Trucks as displayed at A Century of Progress. The 6-cylinder engine, clutch and transmission are cut away to show the operation of the various parts. Removable cylinders, hardened exhaust-valve seat inserts, 7-bearing crankshaft—important features of this engine, are shown clearly.

1915

It is necessary to tie up a large investment in stocks of truck parts or to maintain their own stations to get prompt, adequate, and economical service. Every owner, large and small, benefits from the international standardization of service. It is a vital and natural factor in the low cost of operation demonstrated by an army of International users.

International Model A-5 3-ton truck Chassis, as displayed at A Century of Progress.

International double-reduction drive Rear Axle, as displayed at A Century of Progress. The gears and bearings are exposed and are in continuous operation.
International Trucks exhibited in Travel and Transport Building. The Tractor-Truck (Model A-4) with semi-trailer van has a pay-load capacity of 12 tons. The cab has a sleeping compartment. The small truck is a half-ton International Auto Wagon built in 1907. It has a right-hand drive; a 2-cylinder, air-cooled engine; dry-cell batteries; and a chain drive. International truck experience dates from 1899.

As shown in the upper chart, in ten years International climbed from tenth place to third place in the number of trucks sold. International has held third place during each of the last four years. From 1919 to 1929 International production increased sevenfold while the total production of the industry was only doubled. Since 1929 International’s share of the yearly volume has risen steadily. (International charts displayed at A Century of Progress.)

This International Auto Buggy of 1907 is used in “Wings of A Century,” the Century of Progress pageant of transportation presented daily on the lake front near the Travel and Transport Building. An International Auto Wagon of 1907 and a modern International A-4 truck with a 12-ton capacity semi-trailer van also are used in this pageant.
International Harvester Service

The manufacture and sale of the many diversified lines of International Harvester products have developed, through the years, one of the largest commercial organizations in history. International Harvester manufacturing is carried on in twenty large factories that have a combined ground area of more than a thousand acres. If these factories could be situated side by side in an area half a city block wide, they would extend for more than twenty-five miles. Fourteen of these factories are in the United States, two in Canada, and four in Europe.

These extensive manufacturing activities have made it possible for the Company to own many of its sources of raw materials, thereby assuring dependable supply at uniform prices. A Company-owned steamship transports iron ore from Company-owned iron mines in the Mesabi Range in Minnesota to a large Company-owned steel mill in South Chicago, Illinois. Coking coal is obtained from Company-owned coal mines in Harlan County, Kentucky. Extensive Company-owned timber properties are located in Mississippi, Missouri, and British Columbia.

Sales offices are located throughout the civilized world. In the United States and Canada the Company maintains more than a hundred "general line" branch houses where farm machines and large stocks of repair parts...
are stored in readiness for the farmer. The branch house sales and service organizations maintain intimate contact with the activities of each of the Company's several thousand dealers and with the changing needs and problems of local agriculture. Truck sales in the United States and Canada are conducted through 184 Company-owned branches and service stations, supplemented by many hundreds of dealers whose service facilities are approved by the Company. The inter-city user of an International truck usually will find extensive Company-operated service facilities at both ends of his trip.

Since the day when Cyrus Hall McCormick startled the business world by guaranteeing the quality of his product, the tradition of quality has been given first consideration in the design and manufacture of all International Harvester products. Even today conspicuously-displayed posters throughout International Harvester factories constantly remind the workmen that "Quality is the Foundation of Our Business." But as every farmer and every truck user knows, no matter how fine a machine may be when it leaves the factory, the length of its useful life depends in large degree upon the skill with which it is kept in repair. A century of machine-manufacturing experience has taught the Harvester Company the vital importance of after-sale service. Many farmers who purchased International Harvester machines twenty years and in some cases
thirty or more years ago still are able to keep their machines in working order because of the continuous repairs service they are able to obtain. The International Harvester Company is proud of this achievement.