



## We Found the GENERAL MOTORS EXHIBIT one of the most interesting at the World's Fair

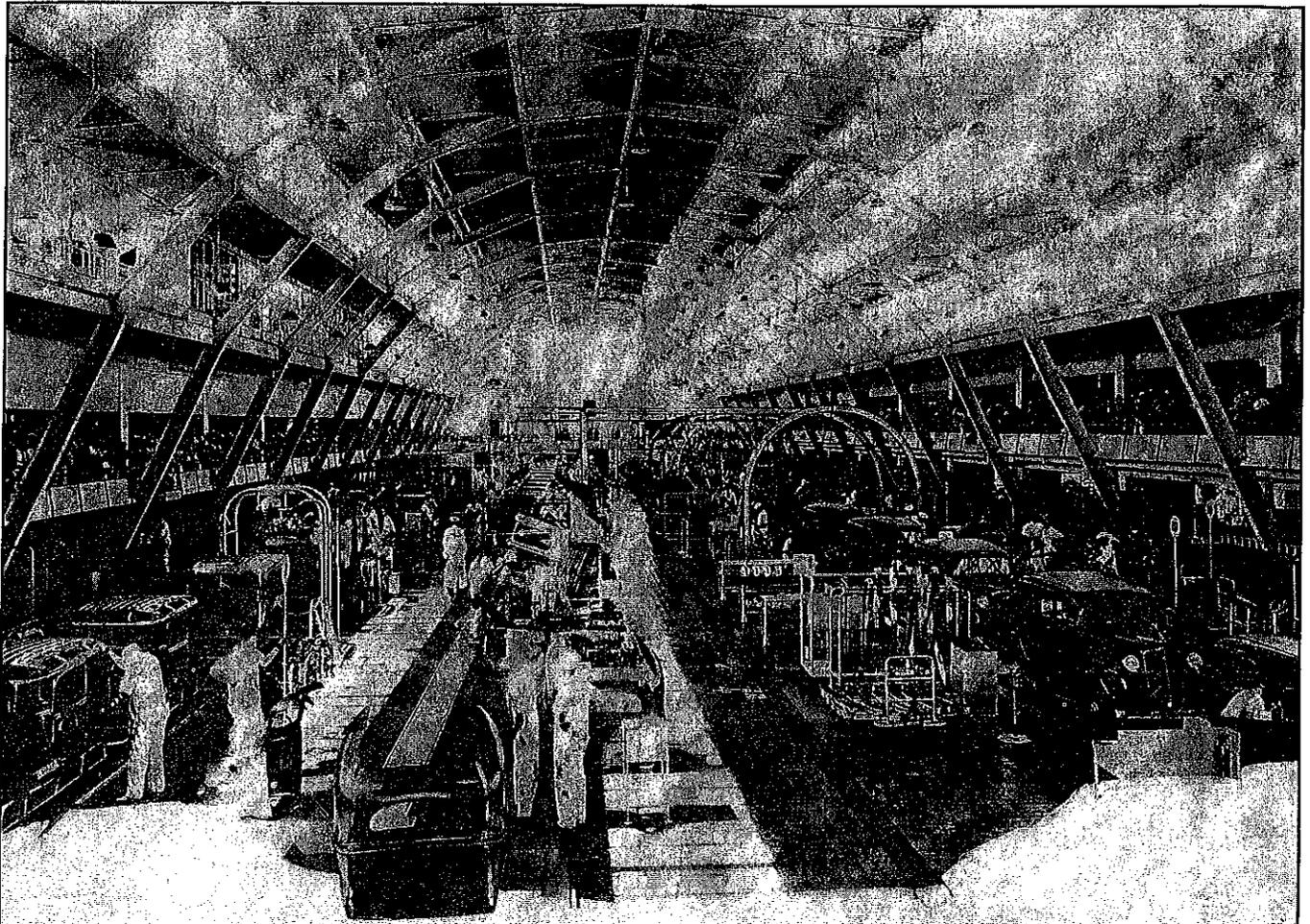
The General Motors exhibit building at A Century of Progress, 1934, is one of the largest structures erected by a private exhibitor. It is 490 feet long by 306 feet deep and is said to be one of the most permanently constructed buildings at the fair.

The building has been entirely repainted for the 1934 exhibition in pure white, with sea green and silver trim blending with bright lettering here and there, making a beautiful and colorful spectacle. At night, the hundreds of lights produce an effect that is fairly breath-taking when witnessed for the first time. It is illuminated by 350 flood lights and several enormous neon signs, including the G.M. insignias atop the 177 foot tower that can be seen for 20 miles up and down Lake Michigan. Enough electric current is consumed in the night illumination to

pump water for a city of 25,000 inhabitants or supply all the street lighting and household power lighting demands for a town of 7,500.

Everything about the 1934 General Motors exhibit except the popular Chevrolet and Fisher Body assembly lines (where visitors can actually see a complete car made) has been changed; in fact, the 1933 visitor will scarcely recognize the General Motors exhibit when he returns in 1934. General Motors has invested over \$3,000,000 in the exhibit. Nearly ten and a half million people visited it in 1933. The building was designed by Albert Kahn, internationally known architect. Decorations are by the Wittbold Studios of Chicago, and Lundoff-Bicknell Company of Cleveland are the builders.

# *The* GENERAL MOTORS EXHIBIT *at a* CENTURY *of* PROGRESS 1934



**A** GAIN in 1934 this is the only place at the fair where you can see automobiles and automobile bodies actually built. The "plant" is a huge, airy room with an arched roof—420 feet long by 90 feet wide. A spectator's balcony a fifth of a mile around surrounds the room. Approximately 5,000 people can watch the operations from this balcony. Looking north in the great Chevrolet amphitheatre, you see two parallel factory assembly lines. The one at the left is the Fisher Body "line"; the one at the right is the Chevrolet final assembly line. The chassis and body arrive simultaneously at a designated mounting point where they are bolted together and completed, ready for the buyer. Eighteen Chevrolets are built here every day. We were fascinated by the orderly workmanship of this modern automobile assembly line.

## We Were Surprised to Learn that so Many Famous Products are Manufactured by General Motors

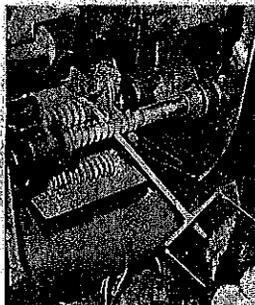
Chevrolet	General Cabs	Winston Engine	Delco Household Appliances	General Exchange Insurance Corporation
Pontiac	AC Spark Plugs	Ethyl Gasoline	General Motors Art and Color	General Motors Customer Research
Oldsmobile	Hyatt Roller Bearings	Moraine Products	Fleetwood Body Corporation	General Motors Research
Buick	Guide Lamps	Inland Mfg. Co.	General Motors Acceptance Corporation (GMAC)	United Motors Service
La Salle	Delco-Remy	Allison Engineering		
Cadillac	Ternstedt Mfg. Co.	Delco Products		
Bodies by Fisher	New Departure	Frigidaire Refrigerators		
GMC Trucks	Delco Heat	Coolers and Air Conditioners		
Yellow Coaches				

MANUFACTURING THE MOST SENSATIONAL

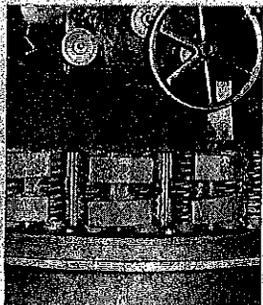
NEW FEATURE OFFERED ON 1934 MOTOR CARS

# Fully Enclosed Knee Action Wheels

FOR ASSEMBLY WITH THE 1934 CHEVROLET CHASSIS



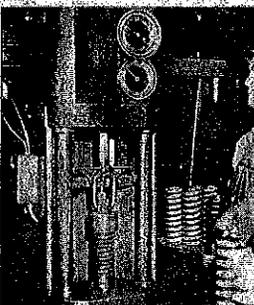
Forming Knee-Action coil spring. A red hot bar of spring steel wraps around the winding arbor, automatically guided to produce the required space between the coils. When the winding is completed, the coil spring drops into the tray below.



This revolving table is circular, and holds 16 coil springs. After one revolution of the table, one end of each spring has been ground smooth and square. The spring is then reversed to grind the other end.



Each coiled spring is heated in an oven to a temperature of 1600 degrees, then it is quenched in oil. The above photograph of the heat treatment shows a workman placing coils in the quenching machine, which holds the coil in correct shape during the operation.



After heat treatment, the coil is compressed to its limit under a load of 3330 pounds, then released under pressure to a height of 8 inches. Large dial gauges enable the operator to check each spring for uniformity, rate and load.



A few seconds after this photograph was taken, the glowing mass of metal had been formed into two front wheel spindles for Knee-Action units, and a similar white-hot lump of steel was ready to be placed under the hammer.

CHEVROLET has invested over \$4,000,000 in developing and manufacturing fully-enclosed Knee-Action wheels so that owners of low-priced cars may enjoy a greater riding comfort than previous types of front springs could provide. Limited space does not permit a complete exhibit of the manufacturing

processes for fully-enclosed Knee-Action wheels at "A Century of Progress" Exposition, but many of the final operations are included in the Chevrolet assembly line. Thousands of visitors will witness, for the first time, how the most sensational feature of 1934 is assembled with the Chevrolet chassis.



A billet of glowing hot steel, nearly shapeless, is placed under the steam hammer, and with a few blows between the dies the desired shape is formed. The Chevrolet forge shop is the largest in the world, in the number of hammers and in output tonnage.



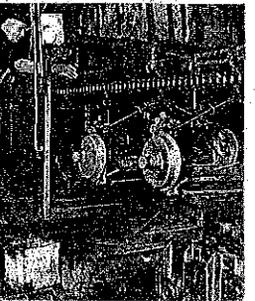
Chevrolet Knee-Action is fully enclosed in a strong, weather-tight housing for protection against water, stones and ice. The housing is welded by special machines into single one-piece units—far stronger than driving conditions ever require.



All parts required for assembling Knee-Action units—springs, housings, covers, support arms—arrive at their proper places along the line on overhead conveyors. Skilled workmen rapidly complete finished units.



Complete front-end assemblies, including the front cross member of the chassis, Knee-Action units, brakes and steering connections, are assembled on conveyor lines for shipment to Chevrolet plants, where the chassis is completed.



Complete front-end units are taken from the end of the conveyor assembly line and travel through a tunnel, suspended from an overhead conveyor. In this tunnel, a lacquer finish is sprayed on the metal.