A VISIT TO THE
General Motors
Research Laboratories
at
A Century of
Progress
1934

AN EYE TO THE FUTURE
AN EAR TO THE GROUND
1 A FOUNTAIN OF COLOR

When the rays from Ultra-Violet lights strike these fluorescent mineral rocks there is a spectacle of glorious color which runs the full range of the rainbow. This is one of the largest and finest collections in the world.

2 MUSIC ON A LIGHT BEAM

Music played on a phonograph record is turned into light. This light, projected upon a photoelectric cell, causes a cathode ray oscillograph to move, and is again turned to music.

3 PHOTO-ELASTIC STRESS STUDY

By making model gears and parts of a motor car out of celluloid, then placing them in its parts, where their images are projected on a screen by polarized light, General Motors engineers can determine the strength or weakness of each design.
5 VIBRATION is cured by an almost human machine. Using a ray of light at accurately points out the location and amount of that small misplaced weight of metal. This machine in the factory moves it and vibration disappears. Every General Motors car must pass this test.

6 THE EFFECT OF OUT OF BALANCE. The engine in the car keeps the wheels turning, and the wheels determine the direction of the car. But every time the engine turns, the car starts to spin too. The machine balances the wheels on the car so that the car never spins when the engine is running. Every General Motors car must pass this test.

7 SURROUND TRIBUNAL. A soundród of tiny rubber balls travels around the machine, and the machine balances the wheels.

8 CAN YOU BEND A RAILROAD RAIL? Bending a railroad rail is almost a woman's job. But it's not hard if you have the right equipment. This machine is a little assurance known as a re-blending bender. It can prove the large tests on the car. General Motors cars are achieved the exact pressure on the right. General theatres machine.

9 THE MAGNETIC W. A. J. B. built in a week. The magnet machine is used to make the car magnets. The magnets are used in the car in the factory and are the magnets that make the car. Every General Motors car must pass this test.
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THE STROBOSCOPIC CRANKSHAFT

The stroboscope catches the crankshaft, revolving 1700 times a minute, in only one position which gives the illusion of complete stillness, or a slow motion effect of the parts. By studying the action of the parts under this stroboscopic light, General Motors engineers design parts and engines that show the best performance and durability.