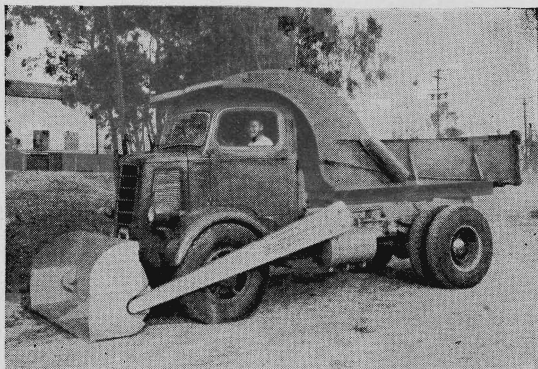
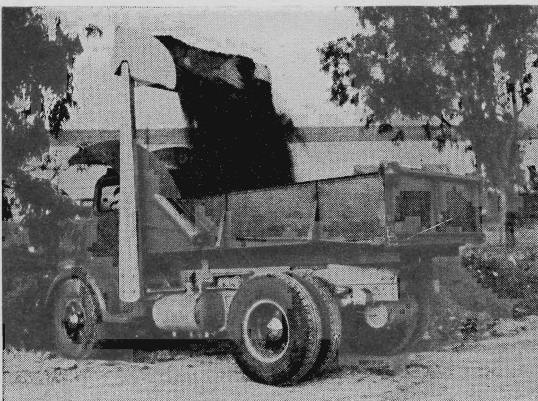


## AUTO IDEAS

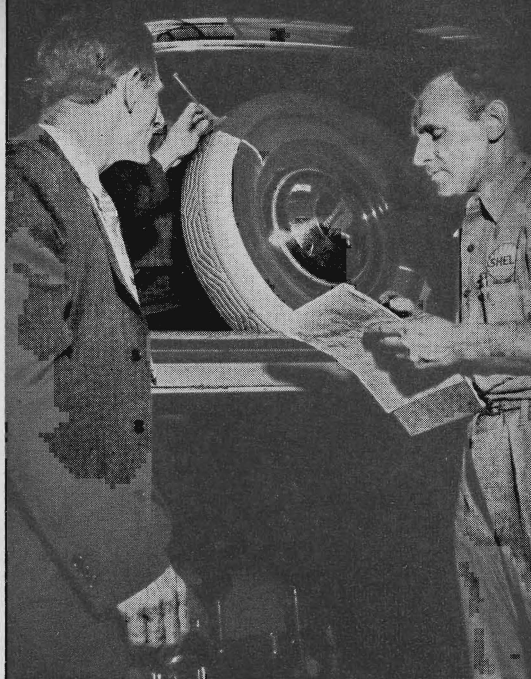
**LOADING A TRUCK** equipped with the automatic hydraulic unit below requires only a few minutes, and the driver can accomplish the job alone without leaving his seat. The shovel, which has a one-yard capacity, will handle earth, gravel, sand, fertilizer, snow, and other loose material. Locked in position in front of the truck, the shovel also can be used as a modified bulldozer. The unit is manufactured by the Western Industrial Engineering Co., of Los Angeles.



With shovel lowered, the truck above moves forward to scoop up a load of earth. Then, swinging the load up and back, the driver dumps it, below, into the truck.



**WHEN TO SHIFT GEARS** for efficient engine operation is shown at a glance by a combination speedometer and tachometer produced by the White Motor Company. Curved white lines on the dial are provided for each transmission ratio. To read engine speed, the driver notes where a scale marked on the pointer intersects the curve of the transmission speed in use. A white area in the middle of the pointer indicates the ideal operating range—from 1,700 to 2,400 r.p.m. At either end is a red area indicating that the engine is outside that range.



**TEST TIRES** like the one above have been installed on a number of Shell Oil Company cars and trucks. The purpose is to determine the wearing qualities of Dutrex, a petroleum product developed by Shell for use as a plasticizer and extender for synthetic GR-S rubber in place of the more expensive Buna-S. With the co-operation of the General Tire and Rubber Company, 212 test tires were produced, half of each tire being made of ordinary synthetic rubber and half of synthetic rubber with Dutrex added. Weekly records of tread wear on each half are being kept. Tests already have shown that the new plasticizer speeds up the production of tires manufactured from synthetic rubber.

