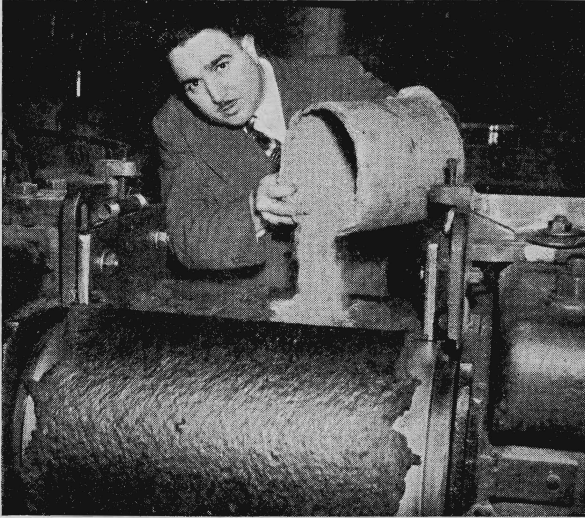
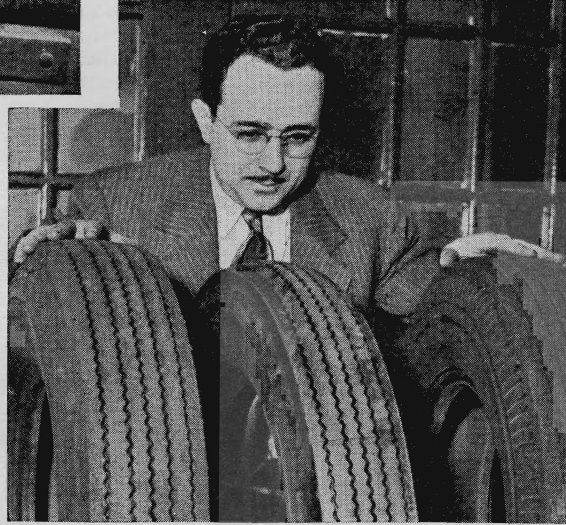


## AUTO IDEAS



Sawdust spread over soft rubber in the process of retreading gives the tire greater traction.

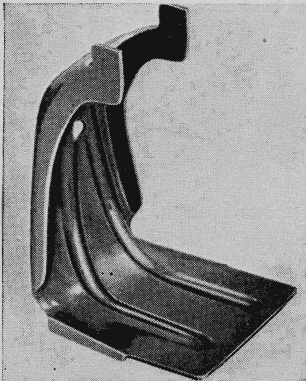


**ORDINARY SAWDUST** eventually may relegate tire skid chains to the limbo of crank handles. Seeking a method of giving tires better traction and eliminating chains, Clarence and Lonnie Gapen, of Morgantown, W. Va., experimented with a number of materials and finally settled upon sawdust. With the cooperation of the Andy brothers, who operate a tire shop in Washington, Pa., they developed a milling process by which sawdust is worked into the camelback used for retreads. In tests, the tires carried an auto up a 12-percent snow and ice-covered grade without difficulty, and started and stopped the car on the hill without skidding. Rubber companies now are making tests to see if the process increases mileage.

At the top, a sawdust camelback is applied. Bottom center is a normal retread. At the right, a sawdust recap after 8,000 miles, and at the left a new one.

**FORGED IN ONE PIECE**, a new jack developed for passenger cars by John M. Westrate, of Detroit, has no movable parts to slip or get out of order. After the head has been fitted against the brake drum, the auto is driven forward or backward until the

jack is resting vertically on its broad base. When the job is done, another short movement of the car frees it. There is no interference with removal of the tire or rim. Secured to the wheel with a safety strap, the device also can be used as a mud hook.



Inserted between the brake drum and rim, this one-piece jack raises the wheel off the ground when the car is driven either forward or backward.

