

New hand methods in tire making

Developed by **R. J. STOKES, Production Engineer**

FOR years R. J. Stokes, Chief Production Engineer of the Thermoid Rubber Company, has been designing and building machine-made casings.

He knows just how much mileage machines can put into casings.

Mr. Stokes, four years ago, determined to develop and produce a **BETTER** casing.

Two years of patient effort

Mr. Stokes and his staff made countless experiments with new tire-making principles, new methods, to overcome common tire faults.

"For," they argued, "casings today are as nearly perfect as old methods can make them. To produce a **better** casing—a casing more resistant to punctures, blowouts, tread separation—we must proceed along new and better lines."

The new casing, from the innermost ply of fabric to the tread, is built up *inch by inch by hand*.

And each casing is the work, from start to finish, of one man, who is rewarded, not on the basis of how many

casings he makes, but how well he makes them.

A new wonder of chemistry

Pure rubber possesses little strength—so little that a casing made of it would run scarcely one hundred miles.

It is the *compound*, the blending of rubber with other chemicals that gives it toughness.

And so Mr. Stokes sought to make rubber tougher, stronger, longer-lived—sought a *new rubber*—that would set new records for mileage.

567 formulas failed to produce the desired result. Many gave rubber amazing toughness, but lacked some other vital quality.

But at last his efforts succeeded far beyond his hopes. The five hundred and sixty-eighth attempt resulted in just the compound he sought—**CROLIDE**.

Every part of casing toughened

Crolide is not compounded with the tread rubber alone. It is blended, in scientifically exact degrees, with every layer of rubber or fabric that goes into the tire.

This makes the tread stronger and the fabric tougher. And it unites the layers of fabric to one another and to the tread in one solid and practically inseparable whole.

Thousands of miles of road tests

During the last two years the president, officers and stockholders of the Thermoid Rubber Company have subjected it to thousands of miles on many of the worst roads in the country.

Never, in any tire, have they seen such durability or mileage so far in excess of their best expectations.

The most costly built casing

These new hand methods are extremely expensive, and so are the rare chemicals that form Crolide.

Naturally, the Thermoid Crolide Compound Casing is a high-priced casing, but **NOT an expensive** casing. We claim frankly, that it will give you, in the end, more mileage for less money than you've heretofore obtained from any tire.

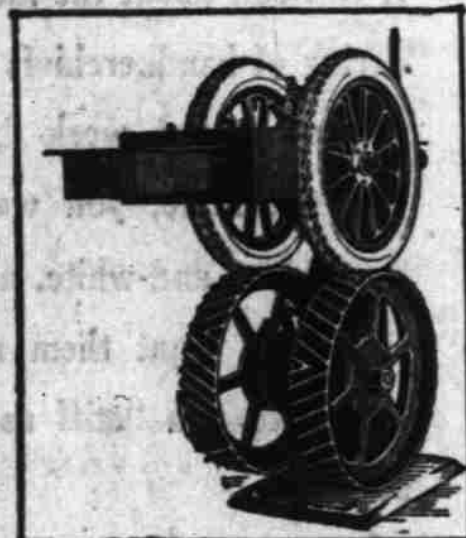
6,000 Miles Guaranteed
(in Ford sizes 7,500 miles)

Makers of the famous **Thermoid Hydraulic Compressed Brake Lining**

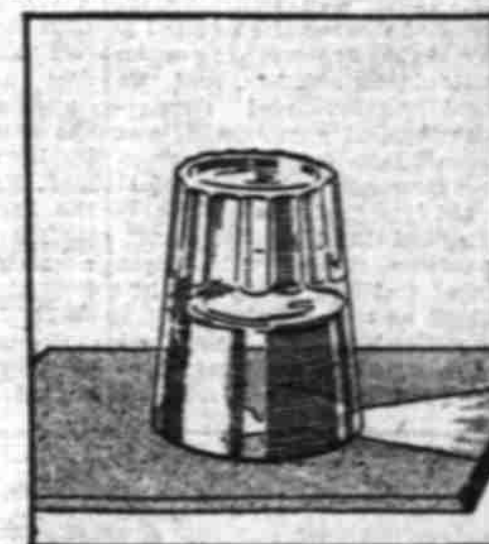
HILEMAN MACHINERY & TIRE COMPANY
291 N. Commercial Street, Salem, Oregon. Phone 787.



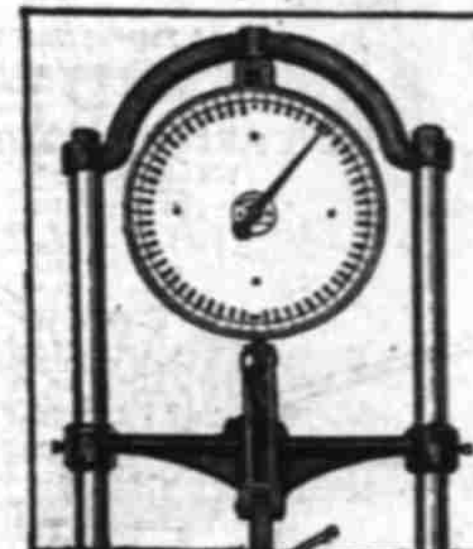
A section taken from the tread of a Thermoid Casing and one from another well-known standard tire, magnified 400 diameters. Note the smooth and compact texture of the Crolide Compound, as compared with the rough, porous character of the other tread.



This tire-testing machine reproduces the severest road conditions. It is used in maintaining Thermoid Crolide Compound Casings at their unusually high standard of serviceability.



When a tumbler of water or oil is inverted on a section of Thermoid Crolide Compound there is no leakage or evaporation, proving that its texture is absolutely impervious to water and oil.



This powerful machine must exert from 60 to 65 pounds pull before it can separate the tread from the cushion on a one inch section cut from this tire.