

PUTTING ON TIRES
IMPORTANT POINT

Careful Application Necessary
to Good Service and Means
Much More Mileage.

REVERSING TIRES HELPS

H. S. Firestone, Head of Firestone
Tire & Rubber Co., Tells How
to Obtain Best Results, and
Condemns Use of Fillers.

BY H. S. FIRESTONE.

President Firestone Tire & Rubber Co.
Lord Northcliffe said in his Cleveland
speech, October 12, that the waste of
an average American household would
support a French household of equal
number. It is certain that the drivers
of many cars waste more than enough
tires to keep an equal number of other
cars supplied.

Waste returns no profit. Stop abus-
ing your tires.
The application of the tire may seem
a minor point—but it is vital to long
mileage. How many turn their tires
to give even wear to both sides?

Careful application of tires is quite
as necessary to good service as the
selection of correct size for load, or
rims of right design and regular in
measurement.

Before applying tires, remove rust
and all other foreign matter from rims.
The danger of pinching inner tubes can
be reduced to a minimum by dusting
suspensions or powdered mica on the
rims so that the tire beads will slip
easily into the correct position.

Reversing Tires Adds to Wear.
Inflate inner tubes just enough to
round them out before placing them in
side of the casing. Do not use tubes of
the wrong size. Be sure that the valves
are equipped with spreaders adapted to
the particular type of casing used, for
instance, Clincher, Quick Detachable
Clincher, or Straight Side. Valves in
Firestone tubes are equipped with uni-
versal spreaders and are therefore suitable
for use in all three types. Dust the in-
side of the case and the inner tube
with powdered mica or talc. This will
reduce friction and therefore prolong
the life of the tire after being heated in
service.

When the tires have been removed
for any reason, it is a good plan, when
reapplying, to reverse them, that is, to
place the worn sides of the tires to-
ward the car. It is not generally known,
though it is a fact, that almost all the
side wear to a tire occurs on the side
from the car. This is due to road con-
struction, rut wear, curb scraping, etc.

The life of a tire may be prolonged
to such an extent that a great deal
more mileage may be secured by turn-
ing the tires about occasionally to ac-
cure even wear upon both sides.

Rims Must Correspond to Tires.
The use of Straight Side cases on
Clincher rims is discouraged. If best
results are to be expected from Straight
Side tires they should be used only on
Straight Side rims which are slightly
wider at the base and permit of the
necessary spread between beads. If,
for some special reason, it is desired to
use Straight Side tires on Clincher
rims, the rims should always be
equipped with filler beads.

Users of Quick Detachable Rims
Having reversible rings should be very
careful that rings on both sides are
suitable to accommodate the type of
tire applied, i. e., when using Clincher
tires both rings should be in position
properly to engage beads and if
Straight Side tires are to be used, both
rings should be in position to fit the
straight beads or straight sides of this
type.

Tire Flaps and Their Importance.
It is not customary to use flaps with
Clincher tires of small size, not because
it is unnecessary, but because of the
difficulty in using a flap and stretching
the tire on the rim so that it will
fit properly. The beads of this type of
tire are stretchable and are made ap-
proximately 1 inch less in diameter
than rim, the object being to cause the
tire to fit snugly to rim after applied.

Several years ago it was a common
practice to use rim strips, a strip of fabric
stretched tightly on rim. These strips
caused the beads to fit very snugly to
flanges of rim and protected the tube
from the rust and other damage. Flaps
should be used, however, in clincher
tires in sizes above 4 inches, unless
flaps or spreaders are used to hold the
beads tightly in clinches of rim so that
inner tubes will not be pinched or
damaged.

The beads of Quick Detachable
Clincher cases and cables of Straight
Side cases are non-stretchable and are,
therefore, made to the approximate
diameter of rim. Flaps should be used
in all sizes of Quick Detachable Clincher
and Straight Side cases, otherwise
much difficulty will be experienced
with the inner tubes.

Punctures caused by sharp objects
mean a lot of trouble for tire users, but the refinements
in rims now make quick changes
possible and this bugaboo no longer
worries the average driver.

"Fillers" Not Recommended.
So-called "fillers" intended to
eliminate the inconvenience of punctures,
will not fit the same in tires of
various makes, owing to the difference
in the design. Some of the most com-
mon filler manufacturers recommend
that, after being in service for a short
time, more filler be added to take care
of the stretching and other changes in
tires.

Resiliency being a prime requirement
of pneumatic tires, it is hard to con-
ceive of an improvement on air or
cushion and elasticity. If fillers be too
soft, the hinging action of tires will be
localized and not permit of strain dis-
tributions to sustaining construction. No
advantage over solid tires can be claimed
for fillers unless the fillers are resili-
ent. To secure the desired flexibility,
fillers are invariably made of im-
pliable materials—and being of this
nature they will flatten under weight.

Objectionable developments are cir-
cumferential fractures from lack of uni-
form filling out of case and from dis-
placement at road contact, weight and
effect of centrifugal force, heat and
expansion. Rims are caused to sag
and become out of round, also the
linches may be spread and twisted as
a result of weight, and pounding action,
cutting above beads of case,
inched tubes, and other annoyances
are frequently traced to these ir-
regularities.

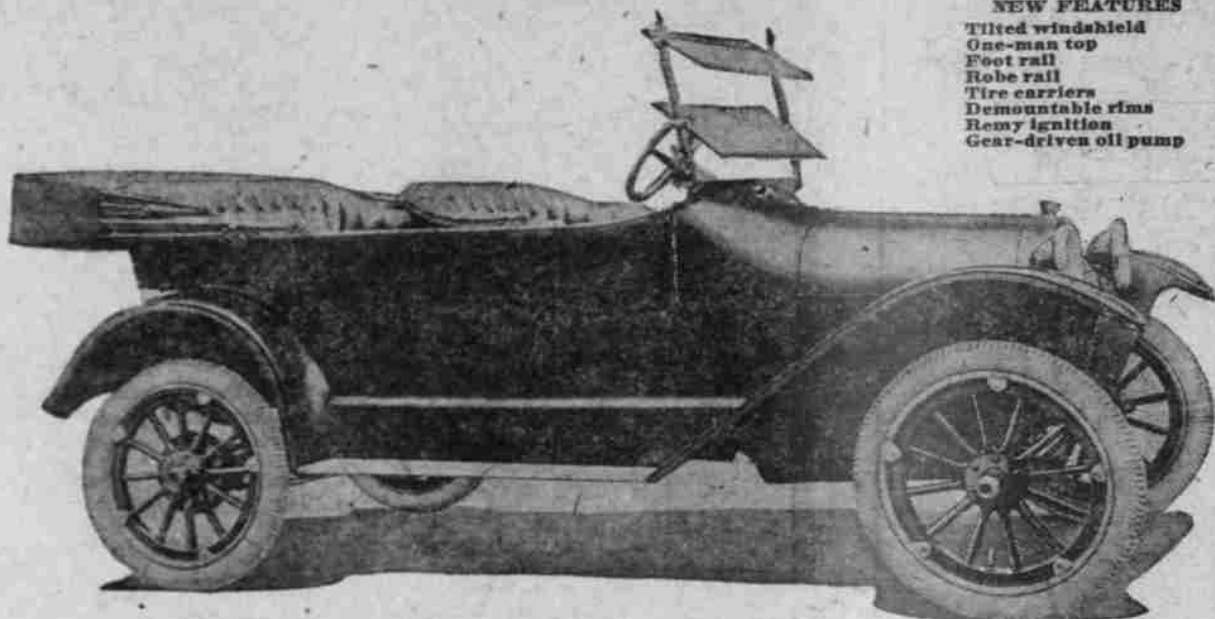
Tire manufacturers waive the guaran-
tee and responsibility for tires when
substitute for air is used. Car manu-
facturers discourage excess weight to
wheels, especially on the driving wheels.
This is particularly true with small
cars, the power and rear axle system
not being designed for moving an un-
usual drag.

Motorcycles that weigh less than 100
pounds have been invented in England
for women.

Buy Your Chevrolet Now Save \$50

On March 1st the price of the Chevrolet advances.

490 Touring Car Price today \$715 March 1st Price \$765
490 Roadster Price today \$700 March 1st Price \$740
Prices F. O. B. Portland



NEW FEATURES
Tilted windshield
One-man top
Foot rail
Rube rail
Tire carriers
Demountable rims
Heavy ignition
Gear-driven oil pump

A Car With Many Records

Established a reputation in being the only 4-cylinder automobile to climb Hall-
street Hill on high gear.

Beat the time of the Shasta Limited to Eugene by 10 minutes, making the sensa-
tional run in 3 hours and 48 minutes, demonstrating the speed and endurance of
the Chevrolet.

Chevrolet leads all other electrically equipped cars in sales for Oregon in 1917.

Ask Us for Demonstration
Open Sundays

All Models on Display in Our New West Side Salesroom

REGNER & FIELDS, Inc.

PHONE EAST 92

SALESROOM (East Side) SALESROOM (West Side)
GRAND AVE. at BURNSIDE BROADWAY at BURNSIDE

AUTO PROSPECTS GOOD

VELLE SALES MANAGER TELLS
CONCLUSIONS FROM TRIP.

Business Men Throughout Country
United in Regarding Motor Car
as Indispensable Necessity.

BY F. E. BRADFIELD,

Secretary and Sales Manager Velle Motor
Corporation.

A short time ago I made a round
trip of the country, visiting many Velle
dealers in all communities. I talked
with buyers, bankers, merchants and
those with whom the dealer comes in
largest contact.
I found a variety of opinion as to the
future status of general business, in-
fluenced largely by war conditions, but
I did find a unanimous belief in the
automobile and in its necessity as a
part of our economic life.

Naturally there are locations in the
territory where business is below the
average, due in most instances to lack
of confidence and a pessimistic frame
of mind, inspired without question by
German propaganda.

The merchant needs his passenger
car or light delivery; the salesman his
runabout. More than ever the farmer
depends upon his automobile to aid him
in the raising of larger crops. I found
the demand for motor cars was insat-
iable and necessary to the success of
our increasing war activities.

There will be shortages, since we
must feed and supply the world, but
with increased crops, established prices,
the elimination of unfair profits and a
unanimity of purpose, those shortages
will be suffered gladly as a part of the
price of our new patriotism.

Even now we cannot build Velle cars
fast enough to supply the demand. As
the billions of money raised for war
purposes finds its way into the hands
of the merchants and the people at
large, this demand will grow even
greater. We predict a shortage of Velle
cars later in the year, and for no
other cause than increased demand.

R. P. Bishop Joins Nash Motors.

Announcement has been made by C.

TIRE FUTURE IS BRIGHT

MICHELIN'S GROWTH IS REMARK-
ABLE IN TEN YEARS.

Advertising Great Factor in Making
Known Michelin Tire Qualities,
Declares President.

J. Houvette Michelin, head of the
American Michelin organization, in an-
nouncing last week that 21 per cent of
the Michelin tire employees subscribed
to the second liberty loan, spoke opti-
mistically of the future of the tire
business.

The Michelin Company is just com-
pleting its tenth year on this side of
the Atlantic, and its third year since
the introduction of the universal tread,
an entirely new type of casing, that
met with instant success and is enjoy-
ing ever-increasing popularity.

Speaking of the new tire, Mr. Mich-
elin paid a great tribute to Ameri-
can methods of merchandising, to the
advanced methods of advertising in this
country and to the great power of the
American press, and especially adver-
tising in local newspapers. Mr. Mich-
elin pointed out that after only three
years of vigorous advertising the ex-
tra weight of the Michelin universal
and its high quality rubber and fabric
are matters of almost universal knowl-
edge, and the fact that the Mich-
elin red rubber inner tube is the only
one made in a circular form like the
casing itself is now known in almost
every American household.

In speaking of conditions generally
in the tire world, Mr. Michelin said
that the users today are studying
economy as never before, that while the
sale of unknown tires is falling off,
the standard makers of quality tires
are enjoying the biggest business they
have ever known.

Premier Proves Popular.

Premier, the aluminum six with mag-
netic gear shift, has finished the first
12 months' test and is running like a
scared deer. Over 3000 Premiers are
in the hands of users, and many things
which at first were mere theories are
now proven facts.

"By unusual breathing capacity in a
motor," says C. B. Voorhis, general
sales manager of the Nash Motors Com-
pany, "is meant the ability of the mo-
tor to get more gases into its cylinders,
filling them—its lungs—more com-
pletely before each explosion.

"The better a motor breathes, the
more powerful are its explosions. The
more powerful its explosions, the more
power it puts into the drive of the
car.

"In every-day language, what is
meant by the breathing capacity of a
motor is its ability to inhale the live
gases into its cylinders and to exhale
the burnt gases. The exhaling process
involves no engineering problem worth
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"Consequently it is extremely im-
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resistance to the inflowing gases shall
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"Because the straight, smooth pas-
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"Starting with this natural ad-
vantage, Nash engineers have further
perfected and improved this type of
motor until the Nash perfected valve-

THEATER MAN TRAVELS IN DORT CAR TO MAKE BOOKINGS.

Tired of Missing Trains, Fox Film
Representative Buys Auto in
Which He "Covers" 600 Miles of
Territory Per Week.

HARRY THOMAS, representative of
the New York district for Fox
Film Corporation, and who has occa-
sionally to visit exhibitors about every
working day in the week, travels in a
Dort car.

The day of catching trains is over, ac-
cording to Mr. Thomas, who says he
guesses he has caught and missed as
many of them as any man who ever
traveled on the road.

Last Summer he lost a big contract
with one of the Strand Theaters be-
cause the train departed a little too
early for him, and right then and there
he decided on purchasing a car. He
tried them all—fifteen, touring cars,
roadsters and even a small truck.

"Then he decided on a Dort. It is a
five-passenger touring car, has all the
latest appliances, plenty of room in
the rear and plenty of power ahead to
transport any amount of "paper" or
other paraphernalia that he needs in
his work. He covers about 600 miles
a week.

"The Goodrich Company again 'go
over the top," was the statement yes-
terday of W. D. Albright, Northwest
manager of the B. F. Goodrich Rubber
Company.

Last Saturday at noon the Goodrich
Company with proper exercises un-
furled to the breeze on Rubber street,
back at the factory, Akron, Ohio's
largest service flag, containing 1414
stars, designating the number of men
given to the service.

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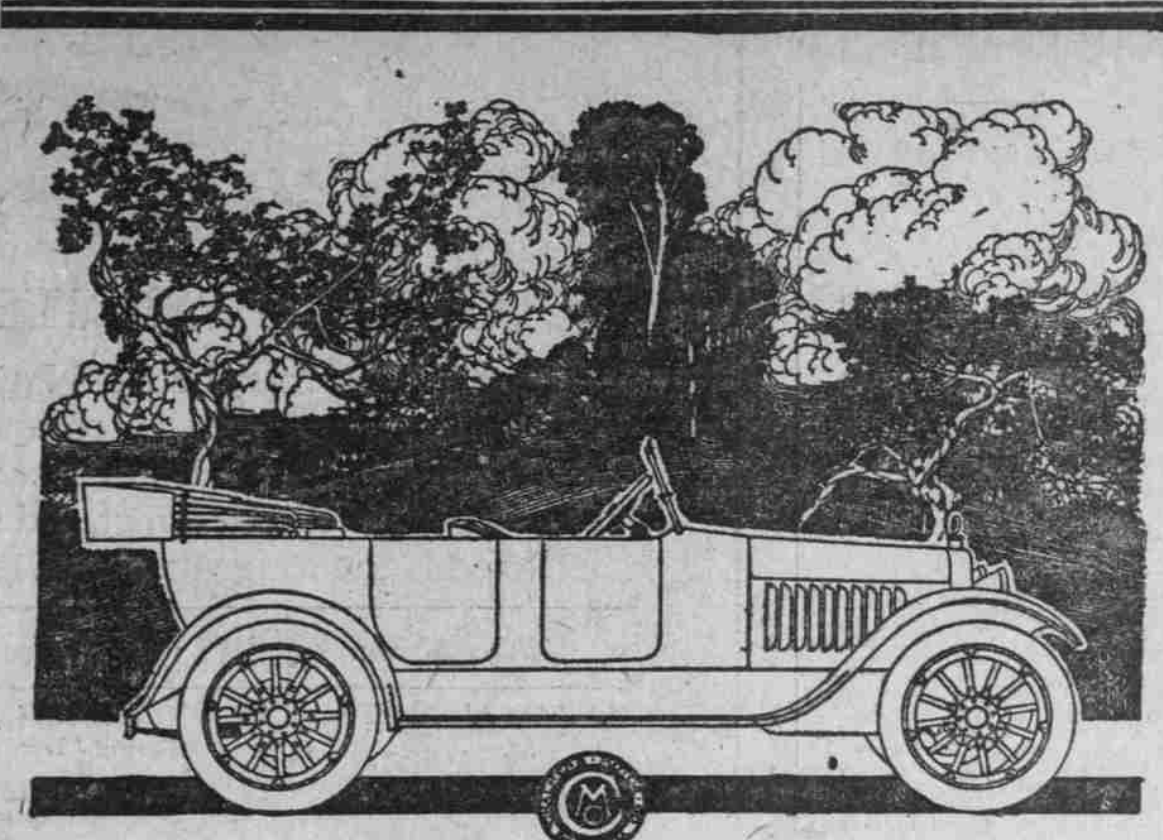
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THIS GREAT CHALMERS ENGINE MAKES GAS PERFORM AS IT NEVER HAS PERFORMED BEFORE

The only way to look upon gas is as so much power.
The great trick nowadays in an engine is to get out of gas
all the power there's in gas.

This current Chalmers engine comes closer, we believe, to
registering 100% on this score than any engine in every way.

First, there's the "hot spot," which "cracks up," as the
engineers say, the raw gas into the most minute little mole-
cules—a wonderful "power vapor."

Then this little device heats up the vapor so that when
it is ready to be touched off in the combustion chambers
it is dead right to deliver the full kick that's in the gas.

A "ram's-horn" manifold plays close teamwork in pass-
ing the vapor from the "hot spot" to the cylinders. It
is an extraordinary piece of engineering—one of those
things on a car that almost tells its own story by the way
it looks.

The result is there's well nigh no waste coming out of
the exhaust. Almost every little drop has been turned into
power. And a power that can be made violent or soft in
the twinkling of a second.

Let us show you where the "hot spot" is located, what
it looks like and see how wonderfully well it performs its
mission.

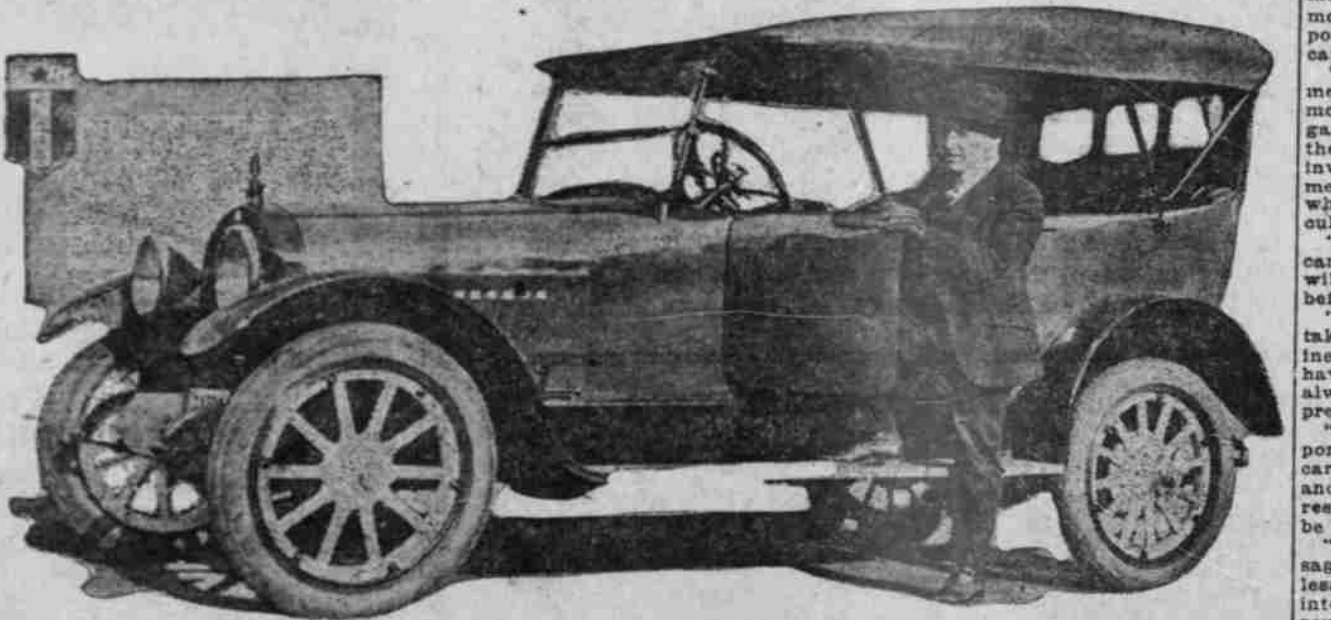
TOURING CAR, 2-PASSENGER SESS \$1290
TOURING SEDAN \$1390
STANDARD ROADSTER \$1465
CARRIOLET, 2-PASSENGER - \$1775
TOWN CAR, 2-PASSENGER - \$2035
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LIMOUSINE, 7-PASSENGER - \$2925
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Hustling
Dealers

Western Motor Car Sales Co.

Distributors
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LEXINGTON CAR, COMPARATIVE NEW COMER IN AUTOMOBILE FIELD HERE, FAST GAINING POPULARITY.



DR. WILLIAM RICE AND HIS NEW FIVE-PASSENGER LEXINGTON TOURING CAR, PURCHASED FROM BRUNN MOTOR CAR COMPANY.

The Lexington car has been represented in this field only a short time, but its fine performance, all-around utility and attractive appearance have aroused great interest in it. Dr. William Rice, in the photograph, liked his new Lexington so much after driving it a week that he came around to sell Isaac Brunn, of the Brunn Motor Car Company, at 444 Stark street, Lexington distributors here, how glad he was he had bought it.

MOTOR MUST BREATHE

VALVE-IN-HEAD TYPE GIVES TO
NASH "INHALING" ABILITY.

Secret of Deep-Breathing Motor Ex-
plained by General Manager of
Nash Motors Company.

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motor," says C. B. Voorhis, general
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the greatest breathing capacity.

"Starting with this natural ad-
vantage, Nash engineers have further
perfected and improved this type of
motor until the Nash perfected valve-

in-head motor inhales exceedingly well.
This has been accomplished by
straightening and enlarging the pas-
sages from carburetor to cylinders and
by providing extra large valves and
high valve lifts.

"That is why the Nash "ix motor is
known as the "deep-breathing" motor.
It is this feature which is responsible
for the speedy acceleration and great
versatility of power in the Nash Six."

RAILROAD FREIGHT DELIVERY

Handling of Packages Direct to
Consignee Suggested.

It is now conceded by at least one
railroad manager that there would be
many advantages, both to the railroads
and to shippers, if the railroads would
make deliveries of package freight to
consignees' doors, just as the express
companies have always made the col-
lection and delivery of parcels a part
of their service to the public.

This manager recognizes that if the
railroads operated their own delivery
service it would replace the disorgan-
ized and duplicated work of innumerable
private trucking services with a
systematized system that would re-
duce the number of vehicles now re-

quired, would avoid much tedious wait-
ing of trucks at freight houses and
piers, relieve congestion in the freight
depots and in the city streets, be much
more economical and prove a great
convenience to the general public.
Under present competitive, unsystem-
atic conditions the several hundred pri-
vate trucking companies in New York
City are unable to handle all the work
that is offered. If the railroads made
their own deliveries, using motor trucks
and organizing the handling of freight
to avoid delays, the work could be done
more quickly and with fewer vehicles.

--SPECIAL ON-- FISK TIRES

New Stock—Old Prices

30x3 NON-SKID . . .	\$12.70
30x3 1/2 NON-SKID . . .	\$16.00
32x3 1/2 NON-SKID . . .	\$18.75
31x4 NON-SKID . . .	\$23.50
32x4 NON-SKID . . .	\$24.00
33x4 NON-SKID . . .	\$24.90
34x4 NON-SKID . . .	\$25.50
35x4 1/2 NON-SKID . . .	\$35.90
37x5 NON-SKID . . .	\$43.45

30x3 TUBES \$2.20
32x3 1/2 TUBES \$2.75
34x4 TUBES \$3.85

Standard Makes of Cases and
Tubes. Large assortment all
sizes. Prices subject to change
without notice. Goods shipped
to all points C. O. D., etc.

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82 N. Broadway, Portland, Or.
Distributors for
AUTOMOBILE TIRE CO., Inc.
The oldest and largest auto tire
jobbing house in the U. S.
20 Branches.
Call or write.

Make Your Ford Start Easy--

We remagnetize your Ford
by raising the foot boards
while you wait.

Big Saving in Cost
Testing Free

John A. Walter Co.

Sixth, Ankeny and Pine
Broadway 2490, A 2490.