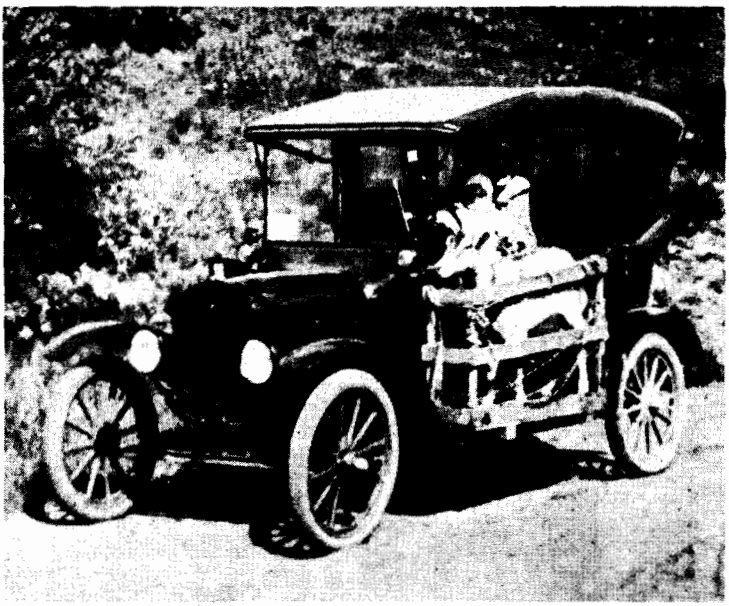
TIRE FACTS
ABOUT THE EARLY
MODEL T FORD



THIS BOOKLET GIVES VALUABLE DATA ON ALL TIRE PROBLEMS PERTAINING TO THE EARLY MODEL T

A man with No. 9 feet in No. 7 shoes won't go far in this world. Likewise, an automobile perfect in every other detail, but without tires exactly suited to its needs is fatally crippled, and causes its owner endless trouble and expense.

You insist that your shoes shall be comfortable and durable and you use the utmost care in selecting the best of material, the correct shape and the exact size for your particular feet.

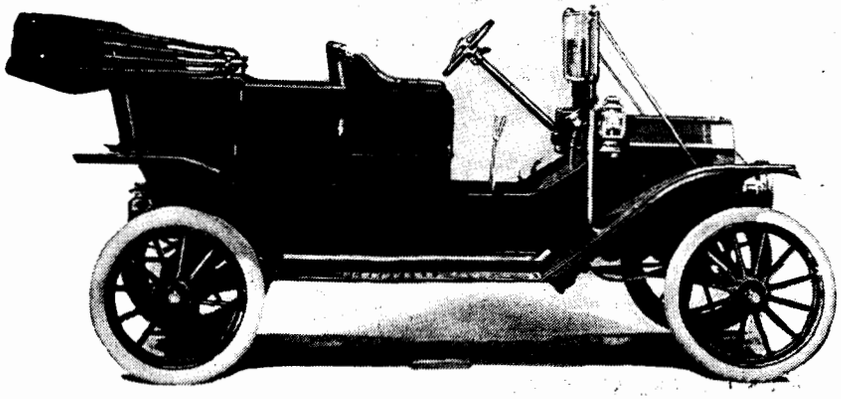
Are you equally insistent that your car shall be equipped with tires exactly adapted to its requirements? Do you realize that there should be a definite, logical, scientific proportion between the size of the tires and the weight of your car, and that this relation is imperative to insure the greatest efficiency of each?

Tires could be too large, but they are usually too small. The load they have to carry should determine their size and the number of cubic inches in a tire should be in exact proportion to the number of pounds it has to support. The FORD Model T has the ***largest*** tires with relation to its weight of any automobile manufactured.

A comparative table of car weights and tire sizes is given on page 6. You will note that the FORD T heads the list with 2.33 cubic inches of tire capacity for every pound of car weight. Another way of saying that Ford tire-mileage cost is reduced to the minimum.

Here is the meat of the cocoanut: the FORD T is the ***lightest*** car in the list, 1200 pounds, its tires are the ***smallest,*** 30x3-inch front, and 30x3½-inch rear, and their cubic capacity per pound of car is the ***greatest.*** Now, as Ford tires are in actual measurements the smallest, they therefore cost the least. In proportion to the weight of the car, they are the largest, which means the maximum of endurance—the minimum of wear and puncture troubles—and insures the greatest resiliency and an extremely comfortable riding car.

For the long life of any pneumatic tire, much depends on proper inflation. If a tire is not pumped hard enough, the flexion and friction will cause rapid wear. Stones also will gash both casing and air tube against the rim. On the other hand if the tire is pumped board hard, the wear is rapid and the bumping will prove most uncomfortable for the occupants of the car. According to experience a tire should be pumped so that when the car is fully loaded, the depression, where the tire touches the ground, is just appreciable, but no more. Another test is to catch the side of the wheel with the hand, and pull it backward



Ford Model T Touring Car
4-cylinder—20 horsepower—5-passenger
$780 including full equipment

and forward forcibly. If there is a pronounced lateral roll, it is a pretty clear index that the tire is too soft.

In the table on page 6 we have shown only cars generally considered as moderate priced. Were the table extended to include all cars, the comparison would be still more favorable to the Ford, as the high priced cars are heavy cars, and the ratio of their weight to the size of their tires is against them.

The number of pounds car weight which is a safe and conservative load for a tire of given size has been figured with scientific accuracy.

For example, a 30x3-inch tire is rated to carry 450 pounds if used on a front wheel, but only 375 pounds if a rear tire. The reason for this is simple and logical. The rear tires get all the strain and wear due to the pull or drag of the driving mechanism and from skidding, also the braking strain, and therefore cannot stand as heavy a load as the unhampered front tires, therefore larger rear tires are imperative.

Various tire sizes and their loads are given below. The car weight for each wheel shown does not include either passengers or baggage, as it is assumed that they will have the same average weight for each make of car.

Twenty-eight by 2½-inch tire, rear 225 pounds, front 275 pounds.

Thirty by 2½-inch tire, rear 225 pounds, front 275 pounds.

Twenty-eight by 3-inch tire, rear 350 pounds, front 425 pounds.

Twenty-nine by 3½-inch tire, rear 400 pounds, front 475 pounds.

Thirty by 3-inch tire, rear 375 pounds, front 450 pounds.

Thirty-one by 3½-inch tire, rear 475 pounds, front 600 pounds.

Table of Tire Facts

Name and Model	Front Tire	Rear Tire	Weight	Cubic Inches of Tire per Lb. of Car	Permissible Weight of Car	Per Cent Over for Safety
FORD T	30x3	30x3½	1200	2.33	1800	50.0
Cadillac 30	34x4	34x4	3000	1.58	3150	5.0
Chalmers 30	34x3½	34x3½	2650	1.39	2450	
Everitt 30	34x3½	34x3½	2200	1.67	2450	11.3
E-M-F 30	32x3½	32x3½	2040	1.68	2250	10.2
Oakland 33	32x3½	32x3½	1800	1.91	2250	25.
Regal 30	32x3½	32x3½	2237	1.54	2250	.6
Hudson 30	34x3½	34x3½	2250	1.63	2450	8.8
Maxwell Q-3-11	30x3½	30x3½	1700	1.88	2000	17.6
Hupmobile 20	30x3	31x3½	1500	1.91	1850	23.3

MODEL T FORD TIRE DATA

Thirty-two by 3-inch tire, rear 375 pounds, front 450 pounds.

Thirty-four by 3-inch tire, rear 400 pounds, front 500 pounds.

Thirty by 3½-inch tire, rear 450 pounds, front 550 pounds.

Thirty by 4-inch tire, rear 600 pounds, front 675 pounds.

Thirty-one by 4-inch tire, rear 625 pounds, front 750 pounds.

Thirty-two by 3½-inch tire, rear 500 pounds, front 625 pounds.

Thirty-two by 4-inch tire, rear 650 pounds, front 800 pounds.

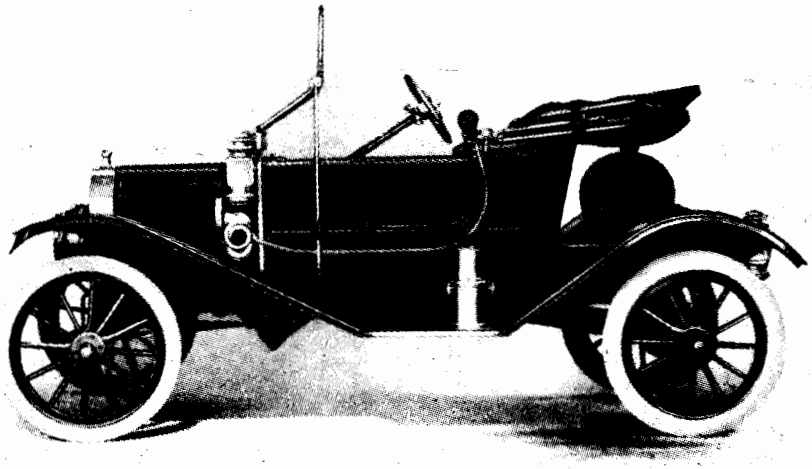
Thirty-four by 3½-inch tire, rear 550 pounds, front 675 pounds.

Thirty-two by 4-inch tire, rear 650 pounds, front 800 pounds.

Thirty-four by 4-inch tire, rear 700 pounds, front 875 pounds.

Thirty-six by 3½-inch tire, rear 600 pounds, front 750 pounds.

Note that a 30x3-inch front tire and a 30x3½-inch rear tire each carry 450 pounds. These are



Ford Model T Torpedo Runabout
4-cylinder—20 horsepower—2-passenger
$725 including full equipment

COMPARATIVE TABLE OF AUTO SPECIFICATIONS AND WEIGHT VS. TIRE SIZE RATIO

	FORD T	Buick 10	Cadillac 30	Chalmers 30	E-M-F 30	Flanders 20	Hupp 20	Everitt 30	Hudson 33	Oakland 33	Regal 30	Maxwell Q-3-11
Bore and Stroke	3¾x4	3¾x3¾	4½x4½	4x4½	4x4½	3⅝x3¾	3¼x3⅜	4x4¾	4x4½	4x4	4⅛x4	3¾x4
Cylinders	4	4	4	4	4	4	4	4	4	4	4	4
Rated H. P. (Catalog)	20	18	30	30	30	20	20	30	33	30	30	22
H. P. acc. to A. L. A. M. rating	22.5	22.5	32.4	25.6	25.6	20.25	16.9	25.6	25.6	25.6	27.25	22.5
Weight	1200	1800	3000	2650	2040	1400	1500	2200	2250	1800	2237	1700
Lbs. per H. P. A.L.A.M.	53.3	80	92.2	103.5	79.6	69.13	88.7	85.9	87.8	70.3	86.7	75.5
Lbs. per H. P. Advertised	60	100	100	83.33	68	70	75	73.33	68.18	60	78.8	77.27
Ignition	Magneto	Magneto	Magneto and Battery	Magneto and Battery	Magneto and Battery	Magneto and Battery	Magneto	Magneto	Magneto and Battery	Magneto and Battery	Magneto and Battery	Magneto and Battery
Clutch	Multiple Disc	Cone	Cone	Multiple Disc	Cone	Cone	Multiple Disc	Cone	Multiple Disc	Multiple Disc	Cone	Multiple Disc
Transmission	Planetary	Planetary	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Sliding Gear
Drive	Shaft	Shaft	Shaft	Shaft	Shaft	Shaft	Shaft	Shaft	Shaft	Shaft	Shaft	Shaft
Front Axle	I Beam	Tubular	I Beam	I Beam	I Beam	I Beam	I Beam	I Beam	I Beam	I Beam	I Beam	Tubular
Wheel Base	100″	92″	116″	115″	108″	100″	110″	110″	114″	100″	107″	93″
Price	$700.00	$1150.00	$1700.00	$1500.00	$1000.00	$725.00	$900.00	$1350.00	$1250.00	$1200.00	$1000.00	$1000.00
Tires... Front	30x3	30x3½	34x4	34x3½	32x3½	32x3	30x3	34x3½	34x3½	32x3½	32x3½	30x3½
Tires... Rear	30x3½						31x3½					
Cubic inches of Tire per lb. of Car	2.33	1.77	1.58	1.39	1.68	1.84	1.91	1.67	1.63	1.91	1.54	1.88

If a 30 horsepower car weighs 2700 lbs. it carries 90 lbs. per horsepower
If a 18 horsepower car weighs 1800 lbs. it carries 100 lbs. per horsepower

the sizes of the Ford Model T tires. Two facts are apparent: rear tires should be larger than front tires—and Ford builders know what is best and employ it.

With the foregoing table as a basis to determine the safe and consistent size of the tires with relation to the weight of the car, we present a comparative statement, showing the actual and permissible weight of each car listed. It will be seen that the FORD T can add 600 pounds, or 50% of its present weight, and still be within the size load its tires are able to carry safely.

You may have been told, and perhaps have accepted as a fact, that front and rear tires should be the same size. You will waste good money if you follow this advice and for several other important reasons you should know the truth, which is in brief, that rear tires should be larger than front tires.

This statement requires no exhaustive argument to prove its accuracy as the facts are very complete and convincing, but the subject is an important one and a brief discussion of its principal phases will be found interesting and valuable, especially if you are about to buy a new car.

Experts have found by exhaustive tests and scientific deductions, the exact ratio in size between the front and rear tires. It is easily seen that as the front tires get none of the wear and tear of the driving power, braking or skidding strain that is imposed on the rear ones, the latter should be enough larger to compensate this discrepancy.

Ford tires are a perfect illustration of this principle. A 30 x 3 inch tire will carry 450 pounds on the front wheel, but a rear tire of the same size is only allowed 375 pounds, hence we

MODEL T FORD TIRE DATA

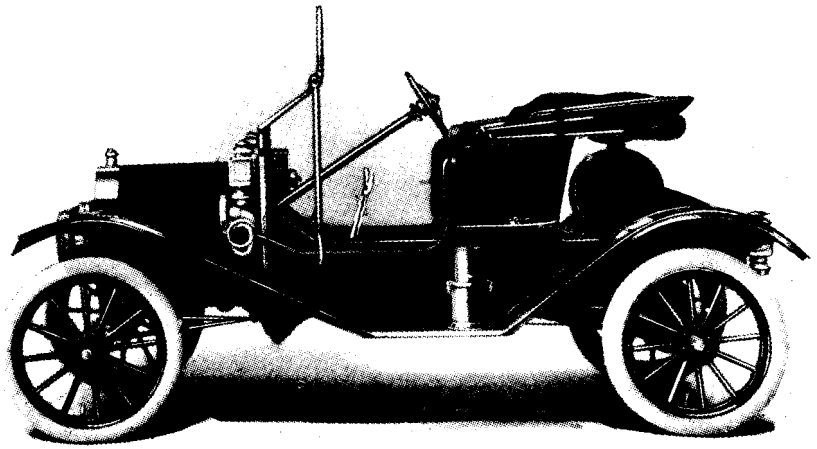
use a 30 x 3½ inch back tire which will support 450 pounds, thereby exactly balancing the supporting strength of the front and rear tires, 450 pounds for each of the four wheels.

Your pocketbook is directly involved in this question. The larger the tire the more it costs of course.

If you buy a car with the same size tires front and rear, you pay too much for the front set and every renewal adds to this useless expense.

Ford tires are planned to secure the greatest efficiency for the car and the lowest cost to the owner.

It has been thoroughly demonstrated, and a test of your own will verify the fact, that the smaller the front tires, the easier your car steers. Every driver appreciates the importance of any feature that adds to ease or smoothness of control of the steering wheel, or in dangerous moments makes quicker turns possible. A Ford car responds to its wheel instantly with surprising ease. It's a pleasure to handle the wheel of a Ford.



Ford Model T Open Runabout
4-cylinder—20 horsepower—2-passenger
$680 including full equipment

The contention that two spare tires must be carried on cars having a smaller front than rear set, can only be applied to heavy, cumbersome machines, as the light, agile Ford doesn't need to carry even one extra casing.

It's the big cars with ponderous tires that must carry an emergency set.

Any roadside repairs of tire troubles on heavy cars are sure to lessen a man's chances of entering Heaven, and the wisest and easiest course for him is to put on a new casing.

Not so with the light weight Ford T. It can be quickly and easily jacked up, tire removed, puncture mended or new inner tube supplied, tire replaced and your Ford on its way again in less time than a casing can be put on a big machine.

It is certainly not imperative, and we do not think it worth while, to carry both or even one spare tire on your Ford. It is sometimes handier to put on a new casing than mend a puncture but the possibility of needing it is too remote to justify the bother of carrying it.

Even if you should decide to carry extra tires for both front and rear wheels, the additional cost of two Ford tires instead of one, is significant for the following reasons:

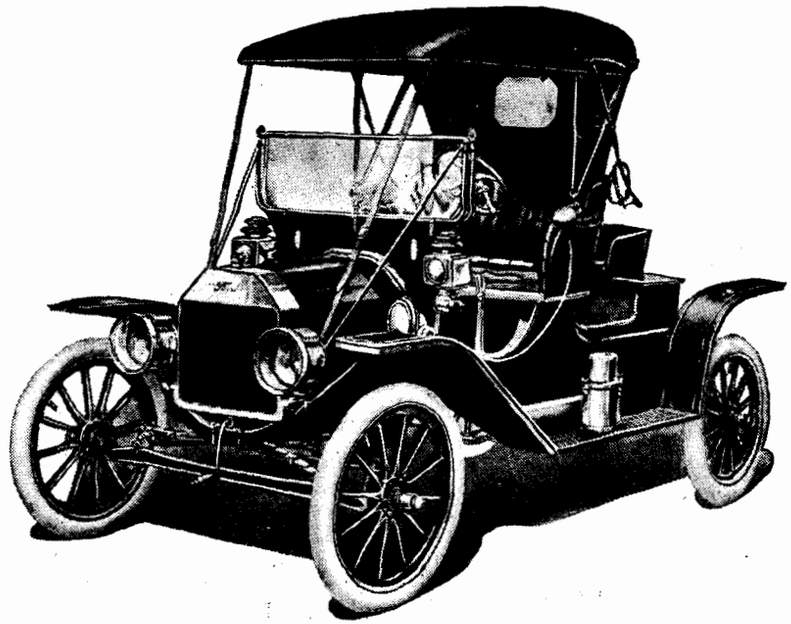
The 30x3 inch tires on the Ford's front wheels cost for both $18.60 less than the two 30x3½ inch rear tires. A Ford front tire complete costs $20.45. Therefore, as we save you to start with $18.60, an extra front tire actually costs you only $1.85. The fact of the matter is, however, that you will find no reason for carrying extra tires on your Ford and when you must replace a front tire, you save $1.85.

MODEL T FORD TIRE DATA

There are so many obvious and conclusive reasons for equipping front wheels with smaller tires than the back ones, that it is unexplainable why any car should be fitted with all tires uniform, but there are a number, mostly of the so-called low-price machines, that overlook or disregard the saving to the owner, and the increased efficiency of a car by using smaller front tires.

We conclude this little talk on tires with a list, on the next page, of various makes of cars with front tires smaller than rear ones, comprising a large majority of those considered the best on the market.

The Ford is one of them, of course, and the Ford will always be found in any list where quality, mechanical perfection, efficiency or merit of any kind is a condition.



Ford Model T Roadster
4-cylinder—20 horsepower—3-passenger
$680 including full equipment

COMPARISON OF SOME CAR TIRE SIZES

Name of Car	Model	Tires	
		Front	Rear
Acme	XX	36x4	36x4½
	"27"	36x4	36x4½
American	Tourist	36x4	36x5
	Simplex	36x4	36x4½
American	Alco "60"	36x4	36x5
	" "40"	36x4	36x5
Chadwick	Model "16"	36x4	36x4½
	" "16"	36x4	37x5
Ford	Model "T"	30x3	30x3½
Frontenac	Model "D"	34x4	34x4½
Franklin	Model "G"	32x3½	32x4
	Model "D"	36x4	36x4½
	Model "H"	36x4½	37x5
Gaeth	Model XXI	36x4	36x4½
Holsman	Model "K"	42x1¼	44x1¼
Hudson	"20"	32x3	32x3½
Hupmobile	Touring	30x3	31x3½
Lozier	Model "H"	36x4	36x5
Locomobile	"30"	34x4	34x4½
	"40"	36x4	36x5
Matheson	"E"	36x4	36x5
Mercer	Speedster	36x3½	36x4
Moline	"K"	36x3½	36x4
Moon	Model "45"	36x4	36x4½
Packard	Model "30"	36x4	36x4½
	Model "18" Runabout	34x3½	34x4
Palmer & Singer	LXII	36x4	36x4½
Peerless	Model "19"	36x4	36x5
	Model "25"	36x4	36x5
Pennsylvania	Model "C"	34x4	34x4½
	Model "B"	36x4	34x4½
Pierce-Arrow	36 h. p.	36x4	36x4½
	48 h. p.	36x4½	37x5
	66 h. p.	37x5	38x5½
Premier	"60"	36x4	36x5
Royal Tourist	M	36x4½	36x5
Selden	"29"	34x3½	34x4
Stearns	30-60	36x4	36x5
Stevens-Duryea	XXX	36x3½	36x4
Studebaker	"D"	36x4	36x4½
Thomas	"6-70"	38x4½	38x5½
	"4-60"	36x4½	36x5
Welch-Detroit		36x4	36x4½
Winton	"17"	34x4	34x4½

EARLY MODEL T SPECIFICATIONS

GENERAL SPECIFICATIONS

BRAKES—Two sets: (a) Service band brake operates on the transmission and is controlled by a foot pedal; (b) Emergency brake is controlled by hand lever at side of car acting on the drums of rear wheels.

CLUTCH—Multiple steel discs, operating in oil.

CONTROL—Three foot pedals. By pressing the first pedal "C" the slow speed is applied; by releasing, it is in the high speed. The center pedal "R" is for reversing the car. The third pedal "B" is the brake. The Ford Model T can be entirely manipulated either by use of the pedals or by the controlling lever at the side of the car. The carburetor lever and throttle just under the steering wheel will regulate the speed of the car from a walk to 40 miles an hour, without shifting a lever or applying the foot pedals.

COOLING—Thermo-syphon and fan.

CRANK CASE—Upper half integral with cylinder casting. Lower half of pressed steel and extended to form lower housing for magneto and transmission.

EQUIPMENT—The Touring Car, Torpedo Runabout, Open Runabout and Roadster include at the fully equipped prices, a top, automatic brass windshield, speedometer, two gas lamps and generator, three oil lamps, tubular horn and a kit of tools. The Town Car and Coupé equipment includes three oil lamps, tubular horn and tools only.

FINAL DRIVE—By cardon shaft with single universal joint to bevel drive gears in live rear axle. Ford three-point system (patented in all countries) with all moving parts enclosed in dust proof casings, running in oil. Vanadium steel throughout.

FRONT AXLE—One piece drop forging in I-beam section, specially heat treated Vanadium steel.

IGNITION—Alternating current magneto, but with no moving parts. Entirely enclosed as an integral part of the engine and running in oil. The Ford magneto always insures a powerful spark. No batteries or dry cells are required.

LUBRICATION—Combination splash and gravity system—simple and effective.

MOTOR—Four cylinders, four-cycle, 20 h. p., 3¾-inch bore, 4-inch stroke.

SHAFTS—Crank and cam, non-welded, drop-forged heat-treated Ford Vanadium steel, with all surfaces ground to absolute accuracy.

SPRINGS—Front and rear, semi-elliptical transverse, all Vanadium.

STEERING—By Ford reduction gear system.

TIRES—Pneumatic; front 30x3 inches, rear 30x3½ inches. Standard makes. Best quality. Larger tires than ordinarily used for weight of the car, which means longest service and greatest comfort.

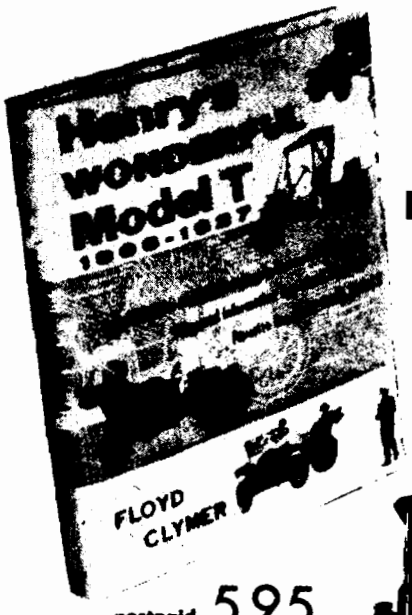
TRANSMISSION—New design Ford spur planetary, bathed in oil. All gears are of Vanadium steel, silent and smooth running in action.

VALVES—Extra large, all on the right side and offset.

WHEEL BASE—100 inches; tread 56 inches: 60-inch tread for Southern trade when ordered.

All prices are f. o. b. Detroit

Floyd Clymer's latest book



HENRY'S WONDERFUL MODEL T

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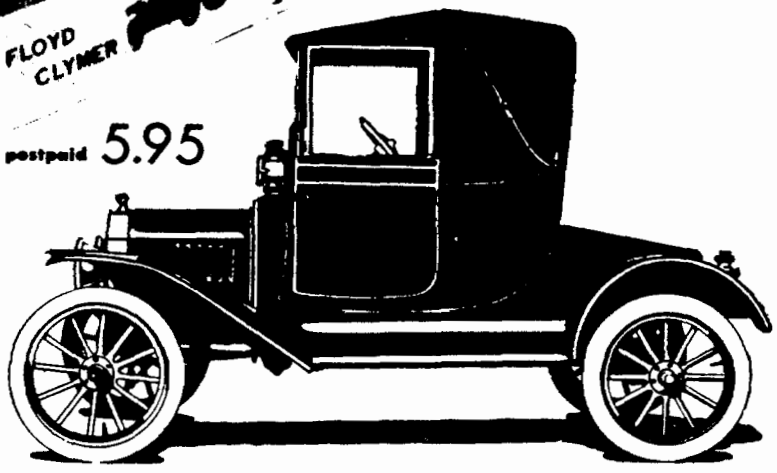

covering the years 1908—1927

This big, handsome book is a nostalgic treasury of information about America's all-time favorite car, covering the long and happy life of the mechanical creature known — in exasperation and affection — as the flivver, the jalopy, and the Tin Lizzie. More than 500 photographs, ads, cartoons, jokes, diagrams and stories combine with Floyd Clymer's amusing text to form a fond album of memories of the Model T. For the motor bug and connoisseur it's a pictorial and diagrammatic delight. For the middle-aged, it's a ticket to long hours of sweet nostalgia. For the young — who unfortunately can't remember the golden days of the T — it's a book to astonish, amuse, and to illuminate those "good old days" they never knew.

$5.95

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