The book of the Fords for 1905
Ford Motor Co.
Detroit, Michigan, U.S.A.
INTRODUCTION

To you, the automobile user, present or prospective, we present this description of our product for 1905 with a feeling of well justified confidence which past successes bring. The Ford automobile stands out pre-eminent among all other well known cars, having carved for itself in the country’s commercial history a place second to none and won a popularity that can be based upon one word,—and that a host in itself,—Merit.

The automobile user of today is well informed before he makes a purchase. The appearance and apparent running qualities of a car are not now deemed sufficient. Not only is the previous record of the car desired, but the present facilities of the manufacturer must be known.

The Ford Motor Company stands second to none in the admirable record of its cars and its equipment for their production. Mr. Henry Ford, vice-president and general manager of the company, a power in himself, is surrounded by a corps of the most efficient designers in the country. The Ford factory is the most modern in existence, controlled by a trained force long experienced in the manufacture and exploitation of motor cars. Every department of the automobile business is admirably covered from the first design to the care of customers using cars.

We enter upon the year of 1905 with the assured feeling that our future will be but a duplication of our past success. The old saying that “seeing is believing” brings to us nothing but welcome thoughts, for in placing our new cars before you we invite the most minute inspection and the most complete comparison.

The automobile which combines to the highest degree the cardinal points of simplicity, reliability, strength, power and durability is the perfect car. The perfect car is not yet built, but a careful reading of the detailed description will convince you that the Ford cars may safely lay claim to more nearly approaching perfection than any other car ever made.

THE CAR OF SATISFACTION
THE FAMOUS FORD

THE MODEL B FORD

The Model B Ford for 1905 is a touring car of light weight and great power. From our experience in automobile building we are enabled to produce a motor of great power and to build a car of light weight, and at the same time of great strength. The handsome appearance of this car is only one of the notable features you will find herein described. To produce such a car at such a price would a few years ago have been impossible. Today our modern equipment enables us to place before the public in Model B a car which we believe cannot be duplicated.

The Motor is the Ford four-cylinder vertical. Every approved feature known to the art of motor construction has now of proven value, have been introduced. The cylinders and pistons are of the best quality of cast grey iron, simply made and accurately ground. The crank shaft is a steel drop forging of ample dimensions, with bearing surfaces ground to gauge. The connecting rods are drop steel forgings, provided with bearing surfaces of large area, thoroughly babbitted and provided with the best of oiling facilities. All other shafts and rotating rods are furnished with the best of bronze bearings. The water jackets are of sheet copper so arranged that they may be easily removed and yet remain perfectly water tight; an arrangement which cannot be surpassed.

Among the notable and unique features of the Ford four-cylinder motor the following are prominent. The crank case, entirely of aluminum, carries in its upper half all the shaft and rod bearings, thus allowing the lower half to be removed with ease, even when the motor is running. The upper half bears the motor supports, which rest directly upon the side frames of the car.

The valve cam shaft runs parallel to the line of the crank shaft, being thoroughly protected and constantly lubricated by the oil splash. The valve seats are most accurately made and thoroughly hardened.

The simplicity and convenience of the commutator or make and break system deserves especial mention. Running vertically at right angles to the cam shaft at its rear end and geared to it by spiral gears is the commutator shaft. At the upper end of the commutator shaft, near the top of the dash, is placed a commutator of marked simplicity. The gearing for this shaft is thus perfectly protected and the commutator placed in a position within easy reach and sight of the driver. The convenience of this arrangement cannot be over stated.

THE CAR OF SATISFACTION
FORD MODEL B. REAR VIEW OF CHASSIS.

FORD MODEL B. TRANSMISSION AND GLOBE DRIVING JOINT.
THE CAR OF SATISFACTION

FORD MODEL B, DRIVING CONSTRUCTION.

FORD MODEL B, CHASSIS.

THE CAR OF SATISFACTION
The commutator is on the principal of the armature and revolving brush being absolutely simple and automatically freed from dust and oil.

The water circulation is simple and effective, the point worthy of particular mention being the simplicity of the geared pump which is connected directly with the cam shaft.

The inlet and exhaust valves are separately actuated and are provided with a simple means of adjustment for wear. The valves are readily removed by taking out the threaded plug in the valve chamber and a pin in the valve.

The oiling system is a marvel of simplicity, consisting of a reservoir of ample capacity with gauge glass, and a set of sight feed oilers on the dash. The oil is caused to flow through the sight feed oilers by exhaust pressure, thus causing the oil to be supplied more rapidly as the engine increases in speed and the supply to cease when the motor stops.

No motor has before been designed combining such remarkable durability and simplicity with so great a ratio of power to weight.

The Ford type of transmission, so successful in the past, has been adapted in an even more practical form for the greater power of Model B. No other type of speed controller allows of changes of speed with so little trouble to the operator, or of so simple construction.

The transmission, giving two speeds forward and one in reverse, consists essentially of a train of gears always in mesh, held in a retaining case of several sections, two friction bands and a series of friction disks. The drive on the high gear is direct, the gears being locked together, giving the most efficient drive possible. A sliding ring wedge causes the various sections of the retaining case to be firmly pressed together, a fibre lined disk at either side of the retaining case taking the thrust. No more simple, efficient, or positive arrangement could be devised. On the low gear a friction band holds a section of the case stationary, thus placing in action a speed reducing train of gears, from a gear on the motor driven shaft through the transmission gears and case to the driving shaft. This system has far greater simplicity of control and an efficiency at least equal to the best slide gear system. The reverse is obtained by the action of a friction band on a second section of the retaining case which places in action a simple system of reducing gears, giving to the driving shaft a reverse motion.

The adjustment of all speeds is absolutely simple, consisting of tighten-
THE FAMOUS FORD

CONTROLLING LEVERS

These are five in number, one each for spark and throttle, two for speed controller and one for the brake.

The throttle lever is placed at the left of the steering post under the steering wheel and is locked in place by a notched segment.

The spark control lever is similarly placed on the right of the steering post.

A vertical lever at the right of the seat controls, with the least possible inconvenience to the operator, the high speed and the low speed, the former being engaged at the extreme forward position of the lever, the latter at the extreme rear position, the mid position being neutral with the motor disconnected. The reverse foot pedal is on the foot board before the operator. The brake pedal, which is supplied with a locking ratchet, is also on the foot board to the right of the reverse pedal.

With the Ford system of control every motion is one which the operator would instinctively make. It requires little thought. If levers should be applied in opposition the only possible result would be the stopping of the car or the motor. In addition to its other features there is the hitherto much neglected feature—SAFETY.

FRAME

A distinctly great advance in automobile construction is found in the Ford frame with its application as a driving member. Simple as it may seem to the casual observer the building of an automobile frame is a complicated and difficult problem never completely solved until the advent of the Ford flexibly suspended frame and protected driving shaft. The importance of this point warrants a somewhat full description in order that the prospective automobile user may thoroughly see the advantages of the Ford construction and the reasons why others have so far failed.

The requisites of the perfect automobile frame, using the word to include all between axles and body, are that it should withstand the shocks caused by the weight of the motor and the weight of the live load as well as the transverse strains due to road inequalities. It should be so flexible that the most uneven road cannot throw it into a strained position and yet so rigid that it will transmit the driving power from the rear axle to the front axle without loss or uneven strain. Its springs should be so made that they will sustain the load of the motor and its appurtenances firmly and yet without undue vibration from road shocks, and at the same time give the easiest possible motion to the part of the car occupied by those who ride. This once attained and frame construction is perfected.

Among the few things yet approaching perfection in automobile construction is the Ford frame as can be easily seen from the following description:

The main frame is of pressed steel built light and strong according to mathematical beam principles. It will be noted that the motor weight is entirely suspended within the end limits of the front springs, the rear motor suspension being but a few inches in front of the rear suspension point of the front spring. This means that practically the entire motor load is borne by the front springs and the portion of the frame between the front spring ends. The live weight is supported by the rear member of the frame at points so close to the rear springs that the frame is practically without strain at this point, the weight being suspended directly from the spring by a pivot of great strength. The frame is moreover quite narrow, thus giving it added strength to withstand cross strains. In brief the main frame can be made light because its construction gives an excess of strength where strength is needed.

The use of the frame as a driving member may be explained briefly as follows, and those who know of the time worn tale of broken springs may yet take heart for the solution is now reached.

The rear springs are not used in any sense as driving members. They are full elliptic in shape which is the most flexible form of spring known and they are used, as they should be, simply as springs to ease the riders.

Attached, one to each of the outer ends of the rear axle are two strong rods running diagonally inward and upward to the point where the driving shaft of the speed controller engages with the driving bevel gear shaft. It is these two rods that transmit the driving power from the rear axle to the frame through a large globe universal joint which will be described later. The construction of this globe joint allows the rear axle and its driving rods to assume any position which the most uneven road may give it and yet to transmit surely and fully its driving power without causing the dangerous strains to springs or frame hitherto so common.

The driving power is then transmitted to the front axle through the front springs, and here again the perfection of this construction is seen.

THE CAR OF SATISFACTION
The driving (or in this case pulling) member of the front springs must be strong and stiff. To meet this point the front springs are half-elliptic, this form giving the least amount of side play and enabling the most direct application of the driving force. The spring is so fastened to the front axle that its forward section is short and stiff (little resiliency being there required), while the section to the rear of the front axle is far longer, thus giving a maximum of resiliency where it is needed—under the motor.

The universal globe joint previously mentioned is a very large globe of steel, its ample bearing surface giving great strength, and its well-habited and oiled bearings insuring freedom from wear. The housing of this globe is firmly fastened to a portion of the main frame. In the interior of the globe is a rolling device having a square hole for the admission of the square end of the driving shaft of the speed controller. This square shaft end does not slide in any way. The rolling mechanism inside the ball connects directly with the main bevel gear driving shaft, which runs to the rear axle incased throughout its length in a rigid tube running from the universal globe to the differential gear housing on the rear axle. The entire mechanism of universal globe, drive shaft and bevel gears is automatically oiled by a tube from the main oil reservoir.

Thus in the Ford construction have all the requisites of the perfect frame been successfully met and proven by the most exhaustive tests and thorough trials.

**AXLES AND BEVEL DRIVE**

The rear axle casing is of the best quality steel tubing thoroughly braced. The live axles run in ball bearings of the most approved construction. The bevel gear drive is carefully designed, the gear teeth being specially cut for smooth running, and thoroughly hardened. The spring supports are placed well towards the axle ends, thus insuring the strongest support. The oiling of the drive shaft and bevel gears is automatically done from the main oil reservoir.

The front axle with the knuckle forks is a solid steel drop forging, being so constructed as to offer the greatest resistance to all strains. The knuckle is of the best steel provided with a hardened steel bushing, and turning on a large pin of hardened steel, thus absolutely providing against wear.

**BRAKES**

The car is equipped with a hub brake of latest pattern on each rear wheel, actuated by a foot pedal. These brakes are thoroughly protected and are most reliable and positive in action.

An auxiliary brake is found in the reverse pedal, which can be used for ordinary purposes if desired.
THE FAMOUS FORD

FORD OPPOSED MOTOR.
MODEL C.

THE CAR OF SATISFACTION

FORD MODEL C.
AS A RUNABOUT.

THE CAR OF SATISFACTION
THE FAMOUS FORD

WHEELS AND TIRES

COMFORT

ACCESSIBILITY

INSPECTION AND TESTING

EQUIPMENT AND TOOLS

COMMERCIAL VEHICLES

So marked is the simplicity and adaptability of the Ford Model C that it has proven most popular as a commercial vehicle. It is needless to place before the reader the great advantages in the delivery of goods to be obtained by the use, in place of animal power, of the reliable mechanical power supplied by the automobile. The entire country is now realizing the obvious economies to be thus gained. The requisites for the successful delivery car are reliability, durability, simplicity, power and economy. A perusal of the foregoing description of Model C will convince that these qualities are to be found in this car to the greatest extent.

We recommend most fully our Model C fitted with our delivery top. It is roomy and convenient and will save you time and money. It is not only an economy but an advertisement of your up to date methods. Others are taking it up. Your competitor may be before you.

TO THE DOCTOR

You need not be told the value to you of a few hours saved. Every doctor knows that, and to-day thousands have taken advantage of the time and money economies of the automobile. No longer experimental, the motor car has taken its place among the necessities of existence.

THE CAR OF SATISFACTION

FORD DELIVERY CAR.
THE FAMOUS FORD

The Ford stands first and foremost as the ideal doctor's car. With every quality found in other cars it is conceded to be the easiest riding car of its type known. To the physician whose steadiness of hand and brain and nerve are all important, this is food for thought. The Ford stands for economy, reliability and simplicity. Its past successes vouch for it.

VALEDICTORY

The foregoing description is but a brief summary of the main good features of the Ford cars. Undoubtedly you have found therein many interesting points and it will be our pleasure to more thoroughly explain anything that may be desired. The best and most satisfactory way is, of course, to see the car personally, and if you should not know of our agent that is nearest you, write us for the information.

There is nothing that we are not pleased to show, for the Ford is built "by honor."

SPECIFICATIONS OF MODEL B

<table>
<thead>
<tr>
<th>PRICE</th>
<th>$2,000</th>
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<th>DETROIT</th>
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<tbody>
<tr>
<td>WEIGHT</td>
<td>1,700 pounds.</td>
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<tr>
<td>POWER</td>
<td>Ford four cylinder, 20 horse power gasoline motor.</td>
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<td>WHEEL BASE</td>
<td>92 inches.</td>
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<td>TREAD</td>
<td>55 1/4 inches.</td>
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<td>WHEELS</td>
<td>32 inch wood artillery.</td>
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<td>TIRES</td>
<td>3 1/4 inch clincher double tube.</td>
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<tr>
<td>MILEAGE CAPACITY ONE FILLING (GASOLINE)</td>
<td>At least 200 miles.</td>
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<tr>
<td>MILEAGE CAPACITY ONE FILLING (OIL)</td>
<td>At least 100 miles.</td>
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<tr>
<td>CAPACITY</td>
<td>Gasoline tank 15 gallons.</td>
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<tr>
<td>MAXIMUM SPEED</td>
<td>At least 40 miles per hour.</td>
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<tr>
<td>COLOR</td>
<td>Rich dark green, yellow running gear.</td>
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<tr>
<td>UPHOLSTERY</td>
<td>Black, of best leather, handsomely tufted.</td>
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<tr>
<td>EQUIPMENT</td>
<td>2 side oil lamps, tube horn and necessary tools.</td>
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THE CAR OF SATISFACTION

THE FAMOUS FORD

the main shaft outside the motor, and a radiator coil of ample and increased capacity placed in front of the hood.

The oiling system is absolutely simple, consisting of a brass oiler holding about three pints of oil, sufficient under ordinary conditions for at least 100 miles running, and a set of six sight feeds connected with the cylinder and bearings of the connecting rod and crank shaft. The oiler is entirely automatic, being actuated by crank case pressure increasing the supply as the motor increases in speed, the supply ceasing when the motor stops. The bearings throughout are of the best quality bronze, those subject to wear being easily adjustable.

Every part of the motor is made as well as perfect design and long building experience can make it. The materials are the best obtainable and the machine work of the highest quality. Every part is interchangeable.

The commutator is a simple arrangement of cam and spring placed on the left side of the car where it can easily be reached. The jump spark system of ignition is used.

A CARBURETOR of the simplest construction and most easy adjustment is used, and is placed in a convenient place directly under the foot board.

Two sets of dry cells are used, being placed conveniently on the rear of the frame. A double throw switch is placed on the right of the driver's seat, allowing the instant use of either set of cells.

THE INJECTION coil is of the best quality and of the vibrator type. It is conveniently placed under the drivers seat where inspection can easily be given to the wire connections.

THE SAME well proven device so successful in the previous model, is used in the Model C with such improvements as has shown us would be advantageous. The transmission consists essentially of a set of gears in a retaining case, two friction bands and a series of friction disks. The drive on the high gear is direct, no gears rotating, all being locked together thus giving the most efficient drive possible. A sliding circular wedge positively and firmly presses together the various sections of the case and the friction disks. The low gear is the most efficient form known being brought into action by a friction band which causes a gear on the motor driven shaft to rotate two gears in the transmission, one of these in turn rotating the gear fixed to the driving sprocket. The reverse is also

THE CAR OF SATISFACTION
THE FAMOUS FORD

actuated by a friction band throwing into action a set of reducing gears which give a reverse motion to the driving sprocket.

In the Ford transmission the simplest form of slide gear device is far surpassed as every advantage of the latter is retained and a far greater simplicity, and durability is obtained.

CONTROLLING LEVERS

The Ford system of driving controls is the most logical in existence. The necessary motions are few and are instinctively made. A hand lever at the right of the seat controls the high and low gear. On the footboard are the brake pedal and the reverse pedal and also the foot lever governing the motor throttle. On the steering post is the small lever controlling the spark advance. If by any chance an operator should make an error in applying a control no other result could ensue than the stopping of the car or motor. Thus is safety assured.

THE CHAIN

Especially attention has been given to the quality and strength of the driving chain and the best roller chain obtainable is used. The chain adjustment is simply made by sliding back the rear axle, the rear springs always remaining parallel to the frame.

AXLES

The rear axle is made as strong as possible being reinforced by two trusses. The differential gear is simple and of the best construction. The front axle is of great strength, the knuckles and yokes being of the best material to withstand road shock and wear.

BRAKES

The principal brake is placed on a drum on the middle of the rear axle and is absolutely positive and perfectly reliable. An easy adjustment is provided for taking up wear. An auxiliary brake is also found in the reverse friction band which can be used in many cases.

SPRINGS

Perfect comfort in riding is assured by the use of specially designed full elliptic springs of the greatest resiliency and strength.

BODY

A remarkably roomy tonneau body of handsome design is one of the strong features of the Ford. The standard color is a beautiful dark green, the finish and upholstering being of the best and most serviceable quality. The body is entirely separate from the running gear allowing it, by the removal of a few bolts, to be easily detached if it is ever desired to thoroughly inspect the working parts of the car.

GASOLINE TANK

The gasoline tank is now placed under the hood where it can be conveniently filled. Its capacity is greatly increased and its cylindrical form is a marked improvement.

THE CAR OF SATISFACTION

THE MODEL B car is fitted with side entrance tonneau body, which has all the advantages of the tonneau, and, in addition, gives easy entry to and exit from the car directly to the sidewalk. The front seat is divided. The body is very roomy and is painted and upholstered in the best and most serviceable manner.

THE STEERING is the most simple construction and is extremely silent.

THE VERY long wheel base insures the easiest and most comfortable riding.

THE MOST simple system of lubrication known is used in Model B, the main system automatically oiling every part of the motor, driving shaft, bevel gears and rear axle.

THE STEERING is positive and irreversible, the gear being very easy of adjustment. The wheel and post are handsomely finished in bright brass and are very strong. The steering rod connections are supplied with covered and adjustable ball joints of great strength.

THE BATTERIES and induction coil are of the latest and most approved type, very simple and most conveniently placed. The jump spark ignition system is used.

No METHOD more easy for the entire control of motor or car speed than the Ford has ever been devised. A maximum speed of at least 40 miles per hour can be attained and on the high gear the car can also be run very slowly by throttling.

THE ADMISSIBLE design and careful construction of the Ford motors enable them to produce a maximum amount of power. The car being, moreover, light and the losses in transmission of power to the rear wheels being extremely small, the rated horse power really understates the power of the car to do work in comparison with other cars of similar price. The rated horse power of the Ford Model B is twenty.

Every PART of the car is easily reached and inspected. The sides of the hood covering the motor can be easily raised and the entire hood is quickly removable. The motor and its appurtenances are compact. The filling of the gasoline tank under the front seat and the filling of the water cooling system through the radiator with its fan are too obviously simple to require special mention. The front mud guards are removable to assist motor inspection.

Two sun-off lamps and a handsome tube horn are the regular equipment. A set of tools necessary for ordinary emergencies is also included.

THE CAR OF SATISFACTION
THE FAMOUS FORD

THE FORD MODEL C

The Model C Ford combines all the good features of the popular two cylinder car of 1904, known as Model A. It is now well proven that the public demand a medium priced, roomy, light car, a simple car and one with ample power and minimum motor vibration. The whirlwind of success brought us by our 1904 Model A is ample proof that it supplied just what is needed. The car of utility is the one which anyone, knowing little of mechanical construction, can count upon every day of the year to take him out and bring him back safely, with no trouble and at low cost. A car that is comfortable for two and ample for four persons.

That this is to be found in our Model C the hundreds of our 1904 friends will testify.

The best proof of the success of the 1904 car, is that the most important changes from it in the Model C are an increase of wheel base and a hood in front, thereby greatly increasing the appearance of the car and allowing an increased gasoline capacity. The Model C is in fact a small edition of a touring car with ample power, and greater simplicity and ease of control.

The reasons for the great popularity of the Ford car may be summed up principally in the following:

- It is powerful, strong and beautiful.
- It is absolutely simple to care for and control.
- It is hard to break and easy to repair.
- It is built of the best of materials and is of the finest workmanship.
- It is easy riding, comfortable and free from vibration.
- It is practically noiseless.
- It is thoroughly tested and sold under guarantee of the most successful motor car builders in the United States.
- It is inexpensive to buy and economical to maintain.

THE MOTOR

The motor is of the water cooled horizontal two cylinder opposed type, giving a maximum amount of power for its size and weight. The cylinder with its water jacket is cast in one piece, thus obviating packed joints so likely to leak. The crank shaft is a steel drop forging with bearing surfaces ground to gauge. The valve stems are hardened and run in oil. The inlet and exhaust valves are of the same size, both mechanically and separately operated. They are easily removable by taking out the threaded plug in the valve stem and removing the spring seat pin from the valve.

The water cooling system consists of a tank near the motor, a pump on
SPECIFICATIONS OF MODEL C

Price—Runabout, $850; Tonneau car, $950; both F. O. B. Detroit.
Motor—Ford two cylinder, horizontal opposed.
Power—Ten brake horse power.
Weight of Car—1,250 pounds.
Wheel Base—78 inches.
Tread—Standard wagon.
Wheels—28 inches diameter, artillery pattern.
Tires—3 inch heavy double tube tires.
Maximum Speed—30 miles per hour.
Capacity Gasoline Tank—9 gallons.
Capacity Oil Reservoir—3 pints.
Cooling Water Capacity—3 gallons.
Mileage Capacity One Filling Gasoline—180 miles.
Mileage Capacity One Filling Oil—100 miles.

ACCESSORIES FOR MODEL C

Tonneau attachment complete, handsomely furnished, spring back and seats, $100.00

Leather top, cloth lined, made of high grade leather, complete with side curtains and lights, and storm apron, 50.00

Rubber Top, made of first quality of goods, complete with lined side curtains, side lights and apron, 30.00
SPECIFICATIONS ON DELIVERY CAR

PRICE—$650.00, O. B. Detroit.
MOTOR—Ford two cylinder horizontal opposed.
POWER—Ten brake horse power.
FRAME—Standard Model C.
WEIGHT OF CAR—1350 lbs.
WHEEL BASE—7½ inches.
TREAD—Standard wagon.
WHEELS—28 inch artillery pattern.
TIRES—3 inch heavy double tube.
SPEED—A proper ratio of speed will be supplied as desired,
CAPACITY GASOLINE TANK—9 gallons.
CAPACITY OIL RESERVOIR—3 pints.
CAPACITY COOLING TANK—3 gallons.
MILEAGE CAPACITY ONE FILLING GASOLINE ON STANDARD CAR—180 miles.
MILEAGE CAPACITY ONE FILLING OIL ON STANDARD CAR—100 miles.
CARRYING CAPACITY OF BODY—Volume nearly 2 cubic yards.
CARRYING CAPACITY OF BODY—Dimensions average 42 inches long, 40 inches wide and 49 inches high.
CARRYING CAPACITY OF BODY—Weight 600 to 800 lbs. besides driver.

TERMS

All machines shipped F. O. B. Detroit.
All orders must be accompanied by a deposit of 20% of the full price.
The goods will be shipped on sight draft with bill of lading or by Express
C. O. D. for the balance due.
All remittances should be made by Exchange on New York, or
Express Money Order, or P. O. Money Order.
Orders executed in rotation as received.
Cars sold according to standard guarantee of National Association
of Automobile Manufacturers.

THE CAR OF SATISFACTION