



THE
Detroit
ELECTRIC

THE
Detroit
ELECTRIC
1 9 1 2

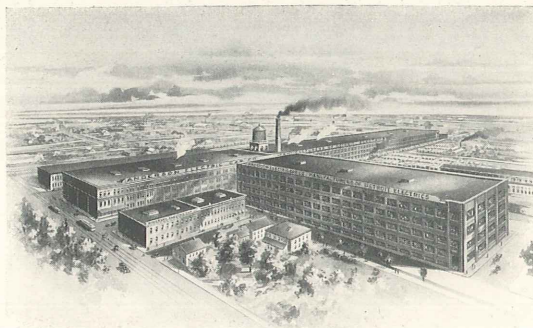
COPYRIGHT, 1912
by THE ANDERSON
ELECTRIC CAR CO.
DETROIT, MICH.



THE
Detroit
ELECTRIC



Anderson Electric Car Co.
Detroit Michigan



MAIN OFFICE AND PLANT, DETROIT, MICH.
THE LARGEST FACTORY IN THE WORLD
DEVOTED EXCLUSIVELY TO THE MANUFACTURE
OF ELECTRICALLY PROPELLED VEHICLES

Page Four



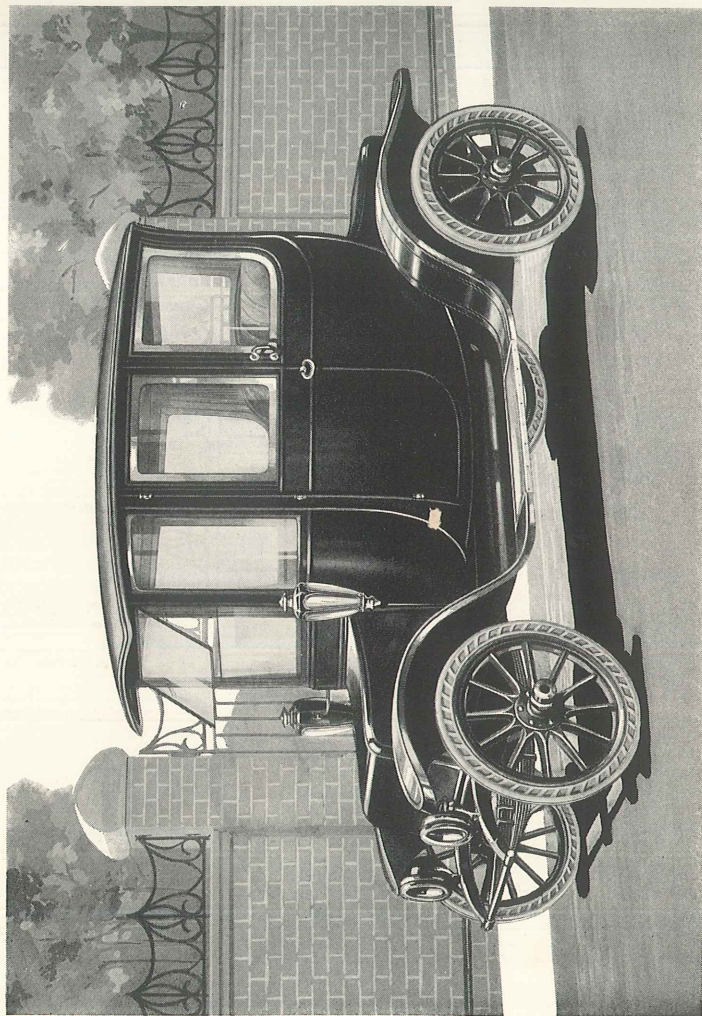
Introductory

THE *Detroit Electric* for 1912 is the achievement of an organization bending every effort to produce the highest type of electric automobiles. Money, skill and art have given their best to the creation of a line of cars which are not only beautiful to the eye, but have what is even more important, a structural perfection which ensures satisfactory and unfailing service for years to come.

Back of every *Detroit Electric* is the interest of a company, building for the future on the rock foundation of owners good-will. It is our belief, as automobile manufacturers, that our obligation to the purchaser does not cease with the delivery of a perfect car, but continues throughout the life and ownership of the investment.

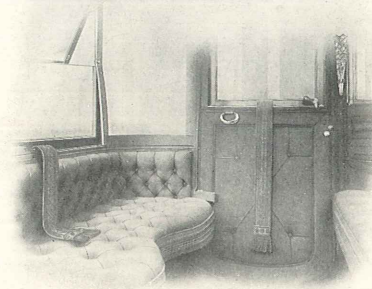
Discriminating buyers will appreciate the sterling qualities and unobtrusive elegance of the new *Detroit Electrics*. They are masterpieces of "motorcraft" which will carry you and yours in tranquil luxury and privacy wherever your fancy directs.

Page Five



Model 25 Extension Brougham

Page Six



Large Comfortable Front Seat, Model 25

Specifications Model 25 Extension Brougham

Body Dimensions:—Rear seat, top of cushion, width 45 inches, depth 20 inches. Front seat, width 43 inches, depth 18 inches. From back of rear seat to back of front seat, 58 inches. Knee room between seats, 20 inches. Glass to glass, 67 inches.

Upholstery:—Superfine Waterloo broadcloth or leather; blue, green or maroon shades. Imported goatskin, fancy novelty cloth or whipcord on order.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—90 inches.

Tread:—56 inches.

Battery:—60 cells A-4 Edison battery; 38 cells 11 plate M. V. M. lead battery.

Control:—Horizontal lever, permitting use of full width of seat.

Brakes:—Two 12 x 1 1/4 expanding brakes in each rear hub.

Steering:—Side lever.

Tires:—Optional, 32 x 4 Special Electric Pneumatic or 34 x 4 Cushion.

Fenders:—Aluminum, full skirted to body.

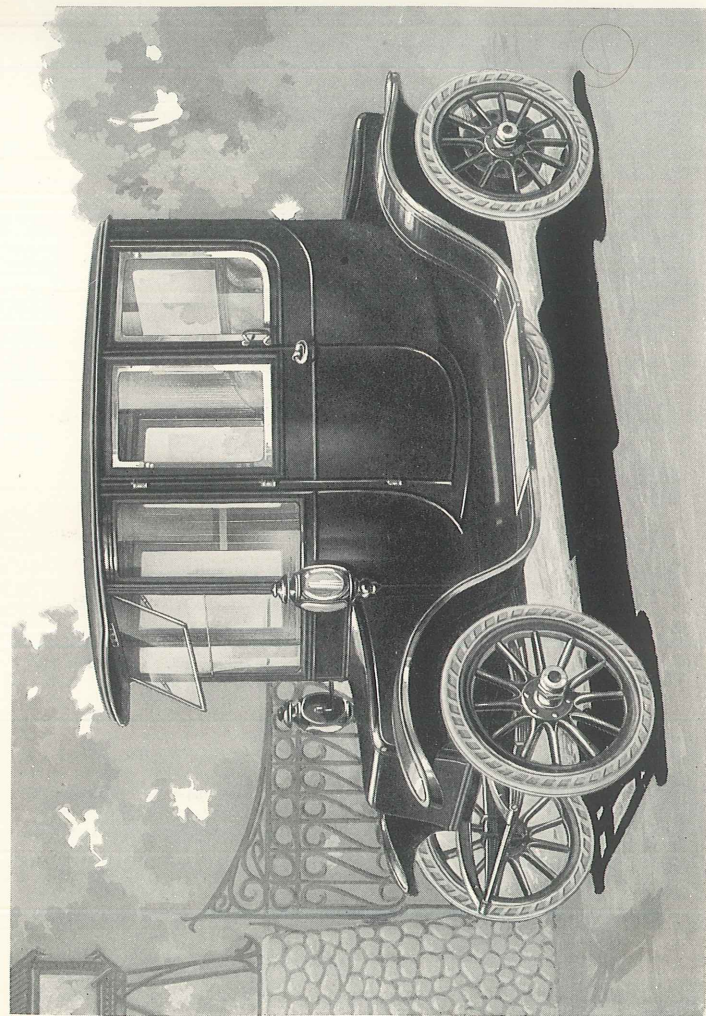
Speed:—5, 8, 13, 17, 20 miles per hour.

Mileage:—65 to 100 miles.

Equipment:—Side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools, flower vase and complete toilet and card case with watch. Lamps of special design in keeping with lines of body.

Price:—Lead Battery\$2800
Edison Battery 3410
F. O. B. Detroit.

Page Seven



Model 26 Extension Brougham

GENEROUS interior dimensions, ample knee room, and wide, deeply upholstered seats, proclaim Models 25, 26 and 27 as cars for all the family. The chassis and interior body dimensions of Models 25 and 26 are the same. The only difference is in the exterior design. Model 27 is slightly smaller than 26, although the lines and construction of the two models are identical.

Specifications Model 26 Extension Brougham

Body Dimensions:—Rear seat, top of cushion, width 45 inches, depth 20 inches. Front seat, width 43 inches, depth 18 inches. From back of rear seat to back of front seat, 58 inches. Knee room between seats, 20 inches. Glass to glass, 67 inches.

Upholstery:—Superfine Waterloo broadcloth or leather; blue, green or maroon shades. Imported goatskin, fancy novelty cloth or whipcord on order.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—90 inches.

Tread:—56 inches.

Battery:—60 cells A-4 Edison battery; 38 cells 11 plate M. V. M. lead battery.

Control:—Horizontal lever, permitting use of full width of seat.

Brakes:—Two 12 x 1 3/4 expanding brakes in each rear hub.

Steering:—Side lever.

Tires:—Optional, 32 x 4 Special Electric Pneumatic or 34 x 4 Cushion.

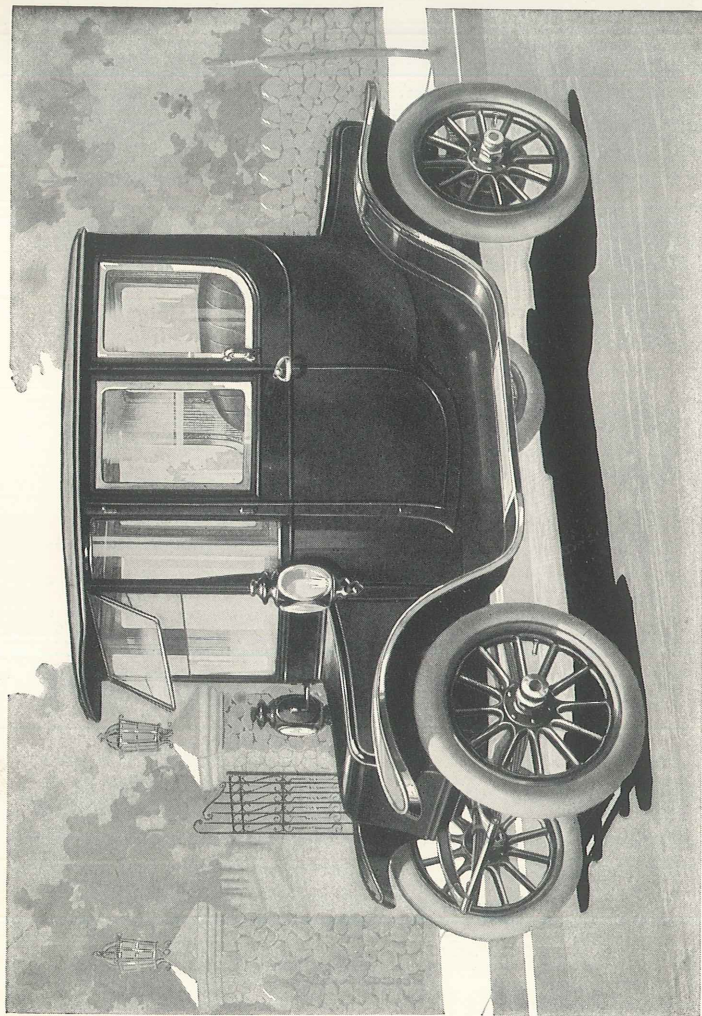
Fenders:—Aluminum, full skirted to body.

Speed:—5, 8, 13, 17, 20 miles per hour.

Mileage:—65 to 100 miles.

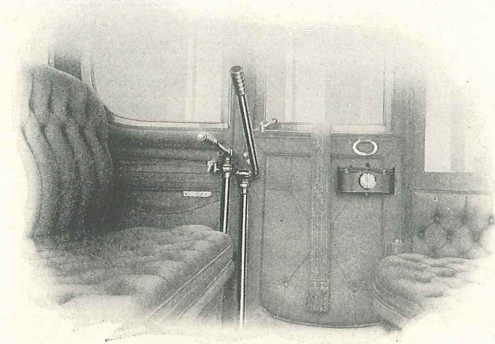
Equipment:—Side lamps, tail lamp, hub odometer inspection lamp, outfit of tools, flower vase and complete toilet and card case with watch.

Price:—Lead Battery \$2800
Edison Battery 3410
F. O. B. Detroit.



Model 27 Brougham

Page Ten



Rear Seat Showing Position of Horizontal Controller

Specifications Model 27 Brougham

Body Dimensions:—Rear seat, top of cushion, width 45 inches, depth 20 inches. Front seat, width 43 inches, depth 16 inches. From back of rear seat to back of front seat, 54 inches. Knee room between seats, 19 inches. Glass to glass, 63 inches.

Upholstery:—Superfine Waterloo broadcloth or leather; blue, green or maroon shades. Imported goatskin, fancy novelty cloth or whipcord on order.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—85 inches.

Tread:—56 inches.

Battery:—60 cells A-4 Edison battery; 38 cells 11 plate M. V. M. lead battery.

Control:—Horizontal lever, permitting use of full width of seat.

Brakes:—Two 12 x 1 3/4 expanding brakes in each rear hub.

Steering:—Side lever.

Tires:—Optional, 32 x 4 Special Electric Pneumatic or 34 x 4 Cushion.

Fenders:—Aluminum, full skirted to body.

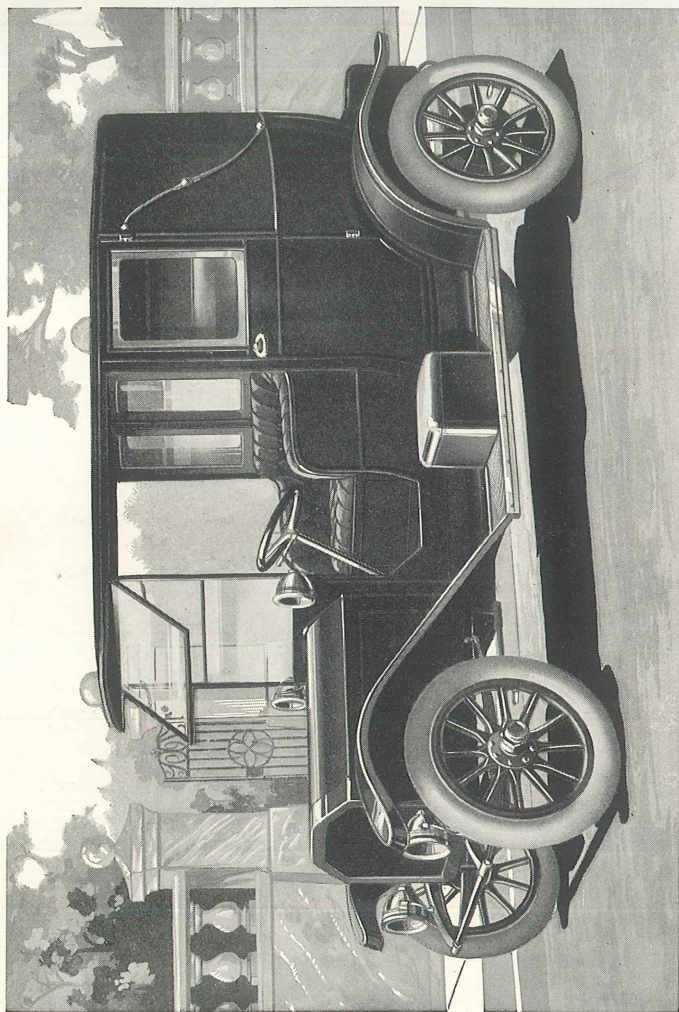
Speed:—5, 8, 13, 17, 20 miles per hour.

Mileage:—65 to 100 miles.

Equipment:—Side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools, flower vase and complete toilet and card case with watch.

Price:—Lead Battery \$2700
Edison Battery 3310
F. O. B. Detroit.

Page Eleven



Model 28 Town Car

THE practical utility of an electric Town Car is bound to be appreciated more and more as its advantages of cleanliness, silence and reliability become more fully understood. It is easy to handle in congested traffic, and has an easy, smooth motion which is decidedly restful. This model is also well adapted to taxicab service.

Specifications Model 28 Town Car

Body Dimensions:—Rear seat, top of cushion, 53 inches, depth 20 inches. Front seats inside, each 14 x 15 inches. Outside seat, width 43 inches, depth 18 inches. Inside measurement from back of rear seat to back of front seat, 57 inches.

Seating Capacity:—Seven persons, five in rear compartment, two on driver's seat.

Upholstery:—Superfine Waterloo broadcloth or leather; blue, green or maroon shades. Imported goatskin, fancy novelty cloth or whipcord on order.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—112 inches.

Tread:—56 inches.

Battery:—38 cells 17 plate M. V. M. lead battery; 60 cells A-6 Edison battery.

Control Location:—On steering wheel.

Steering:—Wheel steer.

Brakes:—Two 12 x 1 3/4 expanding brakes in each rear hub.

Tires:—34 x 4 Special Electric Pneumatic.

Fenders:—Aluminum, full skirted to body.

Equipment:—Side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools, flower vase and complete toilet and card case with watch.

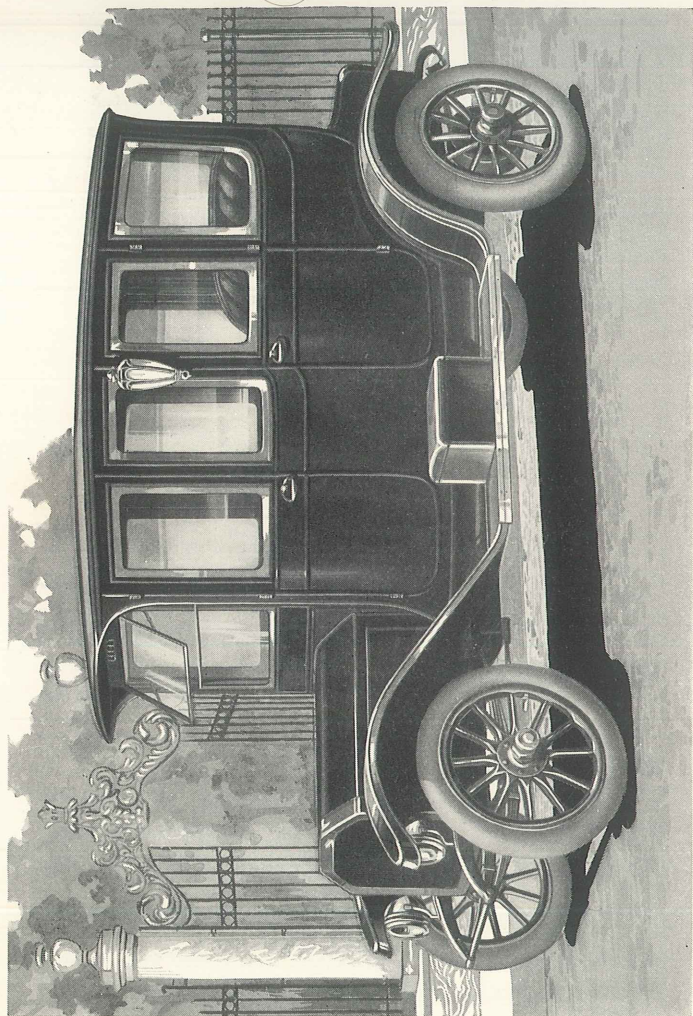
Speed:—5, 8, 13, 17, 20 miles per hour.

Mileage:—50 to 75 miles.

Price:—Lead Battery\$3500

Edison Battery 4400

F. O. B. Detroit.



Model 29 Limousine

IN the metropolitan centers, the electric limousine will fill a need which has long been felt. This particular model affords ample protection for both chauffeur and passengers. Even the coldest winter days will not prevent your keeping any appointment if you have one of these luxurious cars at your disposal. It will always start at the touch of a lever, has ample power and speed, and a mileage radius sufficient for even extraordinary demands.

Specifications Model 29 Limousine

Body Dimensions:—Rear seat inside, top of cushion, width 53 inches, depth 20 inches. Front seat, inside, width 22 inches, depth 19 inches. Driver's seat, width 22 inches, depth 18 inches. Outside auxiliary seat 14 x 12 inches.

Seating Capacity:—Rear compartment—Seat space for four persons, three on back seat, one on front seat. Front compartment—Driver's and auxiliary seats.

Upholstery:—Superfine Waterloo broadcloth in blue, green or maroon. Imported goatskin, fancy novelty cloth or whipcords.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—112 inches.

Tread:—56 inches.

Battery:—60 cells A-6 Edison; 38 cells 17 plate M. V. M. lead battery.

Control Location:—On steering wheel.

Steering:—Wheel steer.

Brakes:—Two 12 x 1 3/4 expanding brakes in each rear hub.

Tires:—34 x 4 Special Electric Pneumatic.

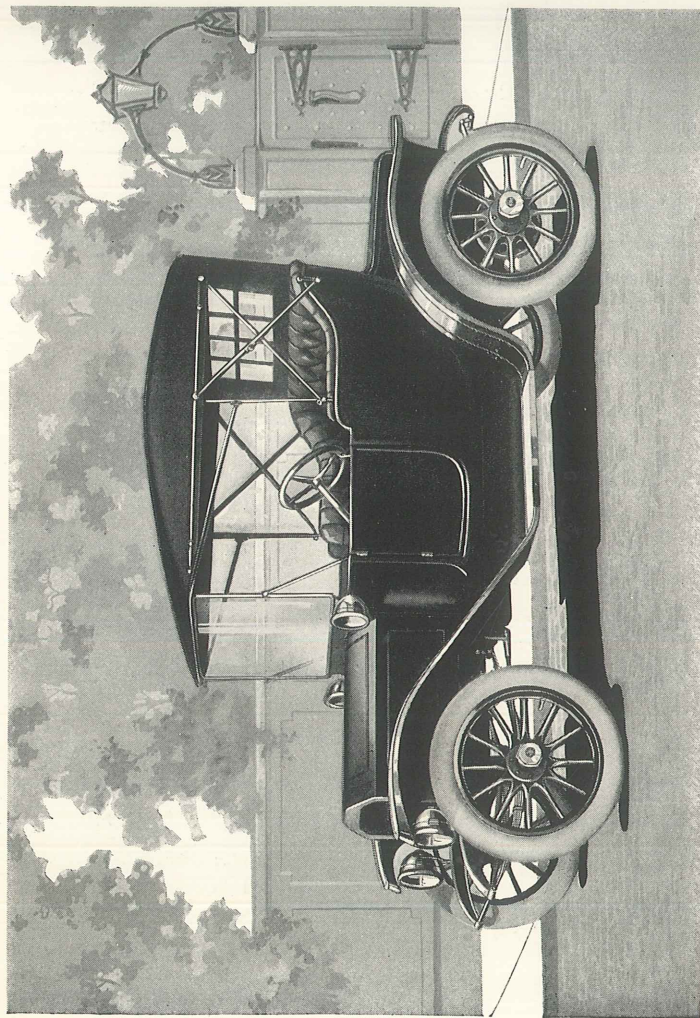
Fenders:—Aluminum, full skirted to body.

Equipment:—Side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools, flower vase and complete toilet and card case with watch.

Speed:—5, 8, 13, 17, 20 miles per hour.

Mileage:—50 to 75 miles.

Price:—Lead Battery \$3850
Edison Battery 4750
F. O. B. Detroit.



Model 30 Roadster

Page Sixteen

FOR the business and professional man whose duties take him into many parts of the city or suburbs, the electric Roadster is an ideal car. It solves the transportation problem, in a manner which is both economical and highly satisfactory. The Model 30 is distinctive and snappy in appearance and very easy riding.

Specifications Model 30 Roadster

Body Dimensions:—Seat, top of cushion, width 45 inches, depth 20 inches. Knee room front of cushion to dash, 30 inches. Width of door, 21 inches.

Upholstery:—Leather, green, blue or maroon shades.

Top:—Cape, with side and door curtains, first quality mohair.

Painting:—Brewster green, blue or maroon.

Wheel Base:—96 inches.

Tread:—56 inches.

Tires:—Optional, 32 x 4 Special Electric Pneumatic or 34 x 4 Cushion.

Battery:—60 cells A-4 Edison battery; 38 cells 11 plate M. V. M. lead battery.

Brakes:—Two 12 x 1 3/4 expanding brakes in each rear hub.

Steering and Control:—Wheel steer: control on wheel.

Fenders:—Aluminum, full skirted to body.

Equipment:—Windshield, two front lamps, two side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools.

Speed:—5, 8, 13, 17, 21 miles per hour.

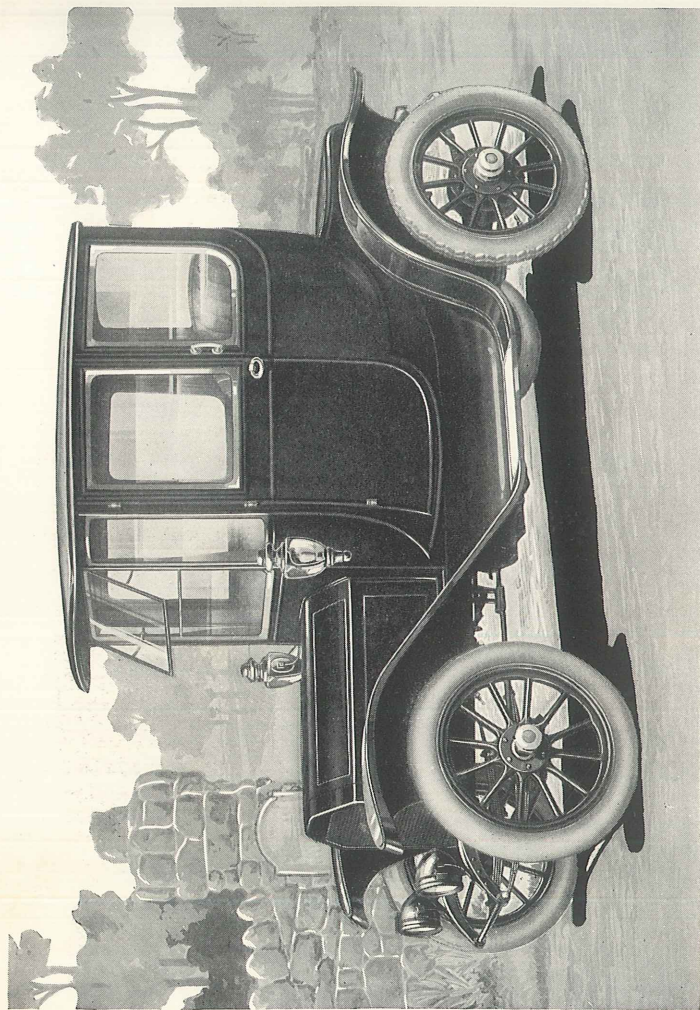
Mileage:—65 to 100 miles.

Price:—Lead Battery\$2200

Edison Battery 2810

F. O. B. Detroit.

Page Seventeen



Model 31 Two-Passenger Coupe with Third Person Seat

SHOULD you prefer a two-passenger enclosed car, with seat room for an occasional third person, your desire will be delightfully fulfilled in the Model 31 coupe. It is suitable for the use of the social woman or the high-pressure business man who must keep his appointments "on the dot."

Specifications Model 31 Two-Passenger Coupe with Third Person Seat

Body Dimensions:—Seat, width 45 inches, depth 20 inches. Folding third person seat, 14 x 14 inches. Distance from back of seat to front of dash, 52 inches. Glass to glass, 58 inches.

Upholstery:—Superfine Waterloo broadcloth or leather; blue, green or maroon shades. Imported goatskin, fancy novelty cloth or whipcord on order.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—96 inches.

Tread:—56 inches.

Control:—Horizontal lever, permitting use of full width of seat.

Brakes:—Two 12 x 1 3/4 expanding brakes in each rear hub.

Steering:—Side lever.

Battery:—60 cells A-4 Edison battery; 38 cells 11 plate M. V. M. lead battery.

Fenders:—Aluminum, full skirted to body.

Tires:—Optional, 32 x 4 Special Electric Pneumatic or 34 x 4 Cushion.

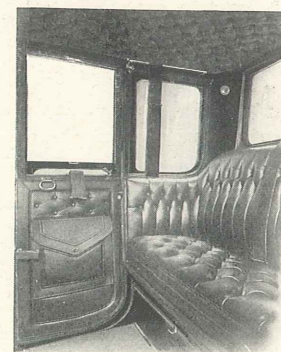
Equipment:—Side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools, flower vase and complete toilet and card case with watch, third person adjustable seat.

Speed:—5, 8, 13, 17, 20 miles per hour.

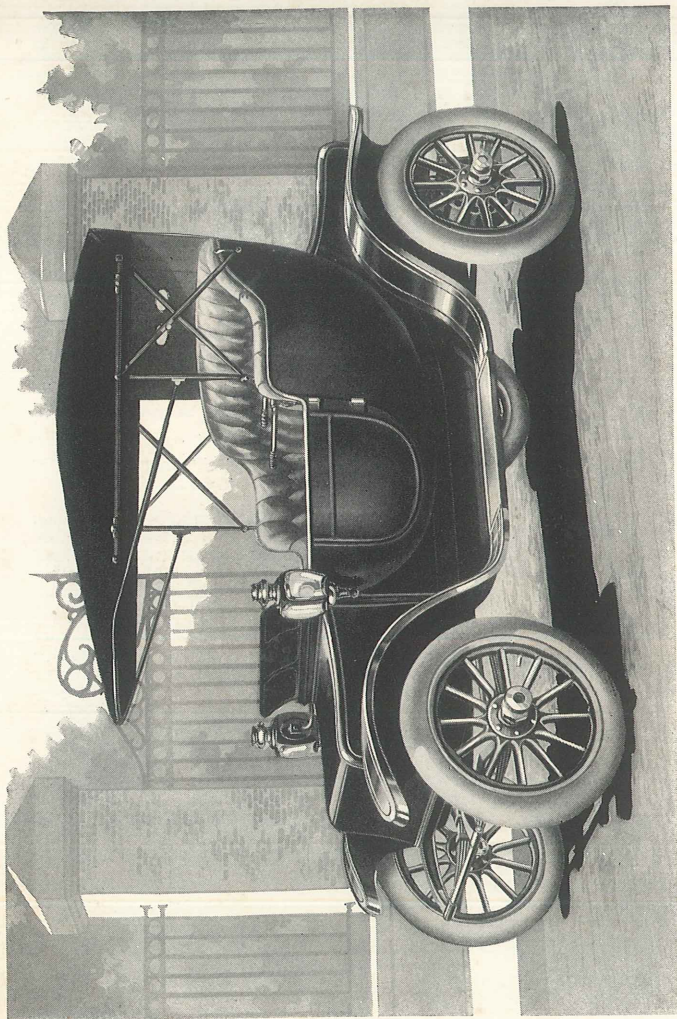
Mileage:—65 to 100 miles.

Price:—Lead Battery\$2600

Edison Battery 3210
F. O. B. Detroit.



Rear Seat View, Model 31, Showing Door Pocket and Hanging Arm Rest



Model 32 Victoria

THE Victoria is a favorite, especially for summer use. The Model 32 is roomy and stylish, and has the popular fore-door feature which gives a touch of distinction and privacy to the vehicle. The open top has been adopted as standard because it is airy in fair weather, and when necessary may be completely curtained. It also permits an unobstructed vision on all sides of the vehicle. The closed Victoria top may, however, be specified if desired.

Specifications Model 32 Victoria

Body Dimensions:—Seat, width 45 inches, depth 20 inches, knee room from seat to dash, 30 inches. Door, 20½ inches.

Upholstery:—Superfine Waterloo broadcloth or leather; blue, green or maroon shades. Imported goatskin, fancy novelty cloth or whipcord on order.

Top:—Buffed enamel top leather.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—85 inches.

Tread:—56 inches.

Battery:—60 cells A-4 Edison battery; 38 cells 11 plate M. V. M. lead battery

Control:—Horizontal lever, permitting use of full width of seat.

Brakes:—Two 12 x 1¾ expanding brakes in each rear hub.

Steering:—Side lever.

Tires:—Optional, 32 x 4 Special Electric Pneumatic or 34 x 4 Cushion.

Fenders:—Aluminum, full skirted to body.

Speed:—5, 8, 13, 17, 21 miles per hour.

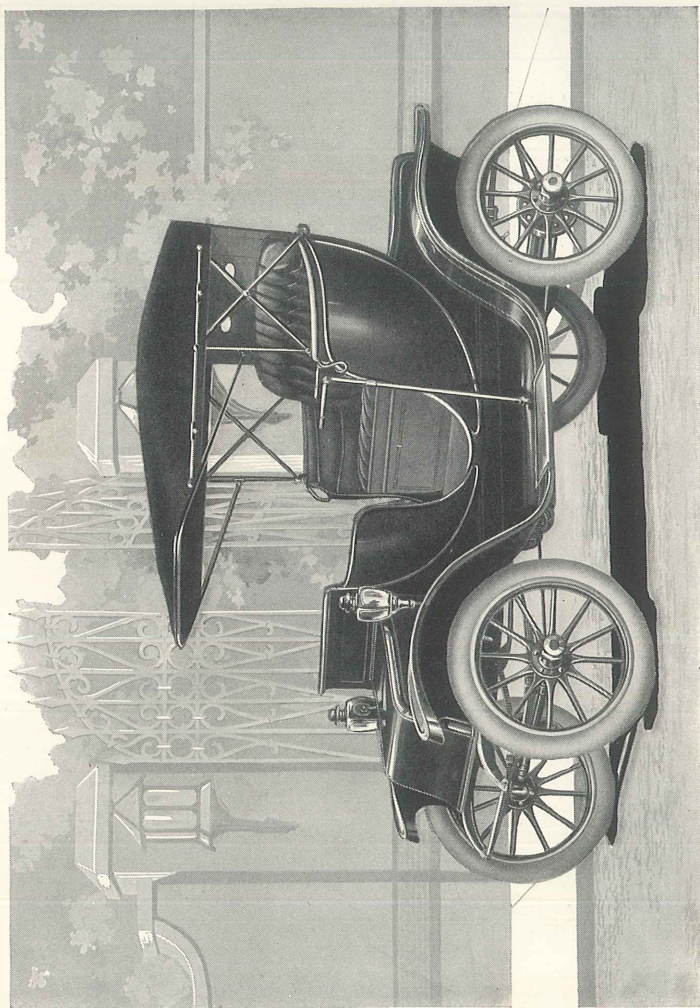
Mileage:—65 to 100 miles.

Equipment:—Side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools.

Price:—Lead Battery \$2000

Edison Battery 2610

F. O. B. Detroit.



Model 14 Four-Passenger Victoria

THE Four-Passenger Victoria is the result of a persistent demand on the part of many open car enthusiasts for a more commodious vehicle than the popular Victoria of standard design. The Model 14 is a car of generous dimensions. The permanent front seat is large and well cushioned, and the knee room between the front and rear seats is ample. The car will seat comfortably four large passengers.

Specifications Model 14 Four-Passenger Victoria

Body Dimensions:—Rear seat, top of cushion, width 45 inches, depth 20 inches. Front seat, width 37 inches, depth 14 inches. From back rear seat to back front seat, 54 inches. Knee room between seats, 20 inches.

Upholstery:—Superfine Waterloo broadcloth or leather; blue, green or maroon shades. Imported goatskin, fancy novelty cloth or whipcord on order.

Top:—Buffed enamel top leather.

Painting:—Blue, Brewster green and maroon. (Special colors extra.)

Wheel Base:—85 inches.

Tires:—32 x 4 Special Electric Pneumatic or 34 x 4 Cushion.

Battery:—60 cells A-4 Edison battery; 38 cells 11 plate M. V. M. lead battery.

Fenders:—Aluminum, full skirted to body.

Control:—Horizontal lever, permitting use of full width of seat.

Brakes:—Two 12 x 1 3/4 expanding brakes in each rear hub.

Steering:—Side lever.

Mileage:—65 to 100 miles

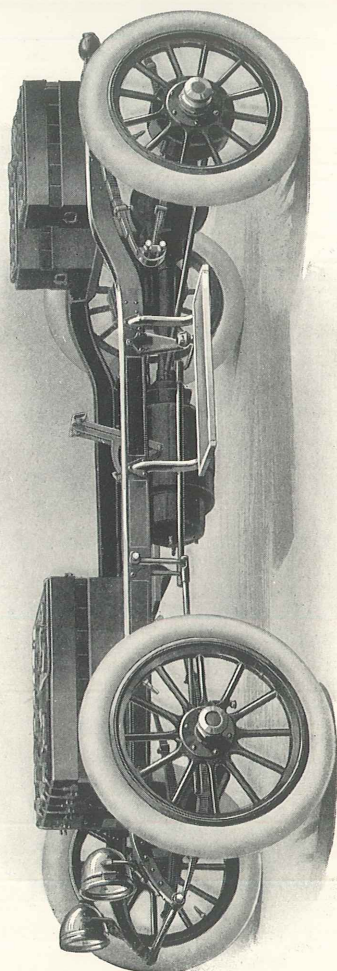
Speeds:—5, 8, 13, 17, 21 miles per hour.

Equipment:—Side lamps, tail lamp, hub odometer, inspection lamp, outfit of tools.

Price:—Lead Battery \$2200

Edison Battery 2800

F O. B. Detroit.



Side View Direct Shaft Drive "Chainless" Chassis

Construction

THE improvements in the *Detroit Electric* for 1912 represent the careful refinement of a car which had already proven its fundamental correctness of design. No radical mechanical changes were made, as none were necessary. Close attention was, however, given to the perfection of details which make the models of 1912 even better than their distinguished predecessors.

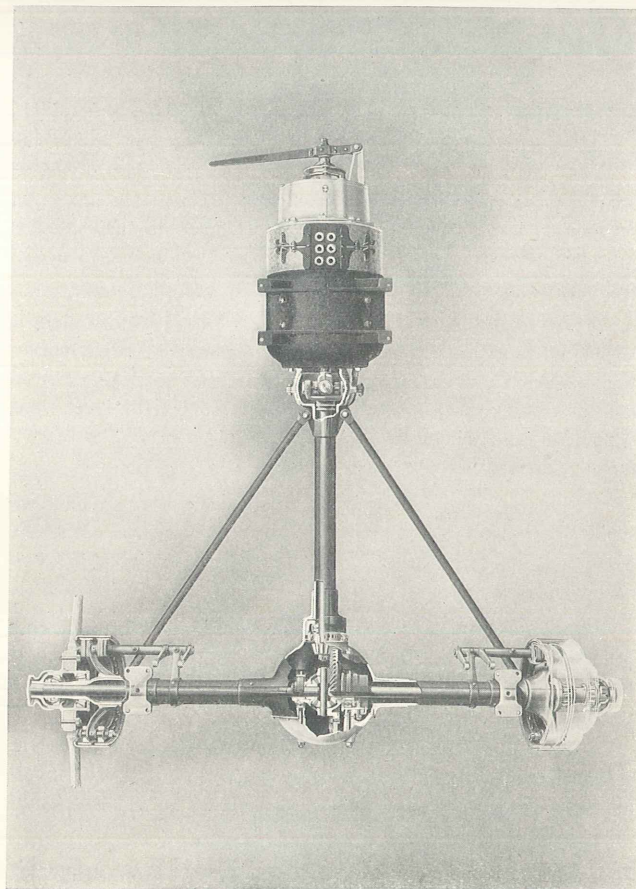
The Direct Shaft Drive "Chainless" has demonstrated its superiority to such an extent that it has displaced all other types of transmission used in *Detroit Electrics*. As a feature of all the new models, its advantages can be secured whether your needs demand a commodious brougham, a snappy roadster, or a silent running, luxurious limousine.

The one standard shaft-driven chassis is built in four sizes with wheel bases of 85, 90, 96 and 112 inches. With the exception of the difference in size, the design and construction of each chassis model is identical.

Construction materials are the finest obtainable. In the chasses steels of nickel, vanadium and various other alloys are used, each selected after a careful analysis of the work the part would have to perform.

An important feature in the production of *Detroit Electrics* is that they are built entirely in our own shops. This obviates the necessity of using "stock" parts and permits the closest possible supervision of details.

Efficiency and a sane balance of construction are secured by scientific methods which make the *Detroit Electric* sturdy and dependable under the most severe service conditions.



Direct Shaft Drive "Chainless" Power Plant

Page Twenty-six

ON the opposite page is shown a phantom illustration of our Direct Shaft Drive, "Chainless" power plant. By cutting away part of the housings usually seen, a view is given of the interior construction. The word "Chainless" does not refer to the absence of side chains alone, but applied to the shaft drive means no chain or gear reductions concealed at the motor beneath the car. Chain or gear reductions between the motor and driving shaft are made necessary by the use of a "High Speed" type of motor, making in the neighborhood of 1600 revolutions per minute for normal car speed. This speed cannot possibly be utilized by the driving wheels without at least two sets of speed reduction devices and consequent waste of power.

The *Detroit Electric* method is to use a moderate speed motor, making only 800 revolutions per minute. This rate of movement requires only one reduction to the driving wheels, which is accomplished by means of a bevel gear in the rear axle, acting through what is virtually an extension of the motor shaft. The use of this type of drive greatly simplifies the power plant construction and eliminates numerous moving and wearing parts, thus increasing efficiency and decreasing upkeep expense. In the *Detroit Electric* shaft drive the modern "direct connected" principle has been applied. This principle is approved by every student of electro-mechanics—it is the most economical method of power transmission.

The motor itself is necessarily larger than the high-speed type and gives an added advantage in that the increased amount of copper enables the motor to withstand greater overloads without the detrimental effect of excessive heating. Still a large motor does not mean extra weight to the car because the weight of complicated chain and gear reductions has been dispensed with. In fact, the large moderate speed electric motor has the same advantage in power economy over the high-speed type motor as the long stroke gas motor has over the short stroke.

Both the pinion gear at the end of the propeller shaft and the bevel drive gear are adjustable. This is an advantage in that adjustments can be easily made should occasion require without removing the gears from the car.

The motor is rigidly suspended to the chassis frame, slightly forward of car center. This not only removes the motor weight from the rear axle, but places the main propulsive effort at a point which gives maximum steadiness, ease of motion and stability.

Page Twenty-seven

ONE pronounced characteristic of the *Detroit Electric* chassis is its clean-cut simplicity. It has a strength and self-sufficiency, which inspire confidence in its ability to brave any emergency. Like all well built pieces of mechanism, it owes its worth to the painstaking attention which has been paid to details.

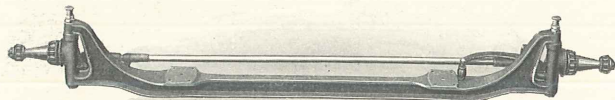
Moving parts are all placed so that they are protected from dirt and dust. All wiring is enclosed in conduits. The floor is detachable, permitting complete accessibility. Every part may be lubricated without getting under the car.

The frame is pressed steel, channel section, of ample proportions with 4-inch drop. This gives the car additional stability and lowers the center of gravity to such an extent that all disagreeable swaying effect is done away with. The width of the frame is 34 inches in the rear; and 30 inches in front. This design enables the chassis which have wheel bases of 85, 90, 96 and 112 inches to turn in circles of 17, 19, 21 and 26 feet radius respectively.

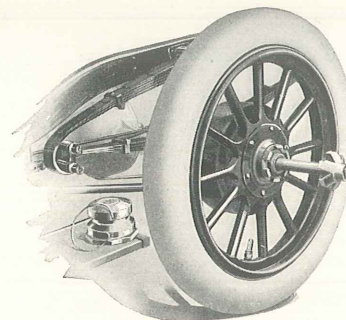
Side and cross members of the frame are hot riveted, a process which prevents loosening of rivets and parts. The front end of side members are bolted together with a spacing rod which strengthens the frame and also serves as a protection to the front of the body.

Springs are of finest quality spring steel, and are extra long and flexible—the front set are half-elliptic, the rear set full-elliptic, scroll end. Spring eyes are bronze bushed and reamed. Bolts are hardened and ground, and integral with them are compression grease cups. This prevents annoying loss of grease cups. Wheels are artillery type. Both front and rear wheels revolve on Timken Roller Bearings.

THE Front Axle, including knuckle yokes and spring seats is I-beam section, heat-treated nickel steel, drop forged. The character of the steel used in this forging, its I-beam section and the fact that the spring seats and knuckle yokes are in one piece with the axle, gives the greatest possible strength with minimum weight.



Front Axle



Full Floating Rear Axle

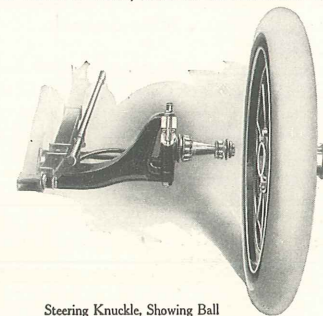
THE Rear Axle is the full floating type. The live section moves on Hess-Bright bearings. The wheels revolve on the axle housing instead of on the axle itself. The result is that the driving axle performs the function of driving the wheels without carrying weight. The full floating axle also permits the disassembling of the rear system without the removal of the wheels.

Models 28, 29 and 30 are equipped with a wheel steer. The steering gear on all other models is the side lever type. The steering column is supported in self-aligning bearings which prevents binding. The connecting rods between the knuckles and steering column operate through adjustable ball and socket joints. The joint on the knuckle lever member assumes a position directly in line with wheel center, eliminating practically all vibration at the steering lever.

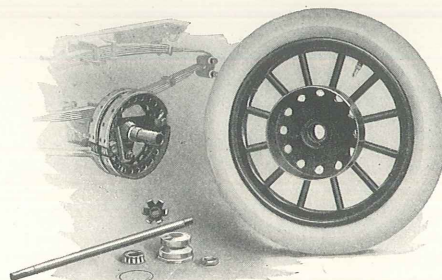
A ball bearing in the knuckle construction makes steering remarkably easy. This is a point of special interest to the woman driver.

THE braking and control system on 1912 *Detroit Electrics* is unique. All parts are substantial. There is nothing delicate, fragile or complicated. The brakes themselves are so powerful and their operation is so simple that one driving a "Detroit" for the first time, feels at once a sense of safety and mastery over the vehicle.

Two internal expanding members, each 12 x 1 3/4 inches, act on each rear wheel, making a total of 263.9 square inches braking surface. One braking surface on each rear wheel is operated by foot pedal alone, and the other is operated either by a second foot pedal or through the speed control lever. The latter method of control is accomplished by placing at the front end of the motor shaft, a cone clutch, which, actuated by the momentum of the car, brings into action the rear wheel brake shoes.



Steering Knuckle, Showing Ball Bearings, which Ensure Easy Steering



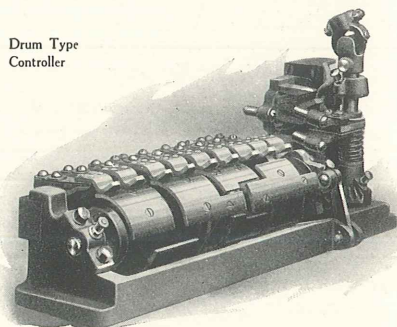
Expanding Rear Wheel Brakes

out transmitting any strain through the driving mechanism or causing any injury to the motor. This is a *Detroit Electric* feature fully covered by patents.

Between the two foot pedals which control the hub brakes is a lever which operates a substantial emergency cut-out switch. This serves as an additional safety device when necessity arises for quick action, as it is possible by one pressure of the foot to instantly stop the flow of current from battery to motor and also apply the brakes, bringing the car to an abrupt stop. When the car has been brought to a stop in this way, it is impossible to release the brakes or start the car until the controller lever has been returned to the neutral position. On leaving the car, the brakes may be set and locked by means of the cut-out and controller levers, and when the controller lever is raised vertically, the brakes cannot be accidentally released. The controller is provided with a Yale lock which absolutely prevents the operation of the car without the necessary key.

The controller is drum type, giving five forward and reverse speeds. It is operated by the horizontal lever already referred to. All forward and reverse speeds can be obtained without the use of foot pedals or removing the hand from the lever. As the lever is advanced, each speed may be perceptibly felt and is also indicated on a dial. A desirable feature of the horizontal control lever is that it allows the use of the full width of seat, and, unlike the side lever type, avoids the possibility of garments becoming entangled in the controller. The horizontal lever also allows the driver to assume a natural, restful position with the hand on the lever at all times.

Drum Type Controller



EACH separate *Detroit Electric* body progresses through the factory as a unit. From the time the sills are first set in place until the last touches in the varnish room each body is treated as an individual piece of work. So while the bodies of each model are identical and uniform because of efficient factory methods—each one bears the mark of the artisan who is deeply interested in the character of the completed vehicle.

All body panels are of aluminum. The lighter weight of the aluminum permits the use of hard-wood frames, pillar posts, top ribs, sills and door jams, which greatly increase the strength and stability of the body. Aluminum and hard-wood construction is no heavier than the former method of wood panels and soft-wood frames and is superior in every way. With aluminum panels there is nothing to check or crack—that means long life and continued beauty of finish, regardless of climatic conditions.

The tops on all enclosed cars are built of one-piece three-ply veneer, the grain of the different pieces running in opposite directions. Tops made in this way are absolutely rain and snow tight. Around the outer rim of the tops is a water shed—a small detail but one contributing to comfort, as it prevents the possibility of water following the glass and working its way inside the vehicle.

A further evidence of careful attention to details is shown in the fact that bodies are cushioned from frames by strips of felt which eliminate squeaks and noise.

All enclosed cars have a tilting glass front. The upper half swings out, forming a windshield. The bottom half slides down. Enclosed models are also equipped with a ventilator at the top of the glass front. This means pure air even when the car is otherwise entirely closed. The materials used in trimming and upholstering *Detroit Electrics* are the choicest the market affords. Superfine Waterloo broadcloth or hand-buffed leather in blue, green and maroon shades are regularly specified, although imported goatskin, morocco, fancy novelty cloth or English Whipcord are furnished on order.

Upholstering in all models is soft and luxurious. The seat cushions are exceptionally thick, and are made to retain their comfort and beauty even after years of service. The ease of the seat occupant next the driver has been enhanced by the provision of a hanging arm rest which permits restful changes of position during a long drive. A further convenience will be found in the door pocket.

Fenders on all models are aluminum, full skirted to body, furnishing protection from dirt. The steps are long and wide and are made of pyramided cast aluminum.

Some Fundamental Facts Regarding the Electric Vehicle as a Type—Its Advantages, Field and Mileage Radius

EVEN during the early experimental stages of its development, the electrically propelled vehicle was found to have qualities of cleanliness, simplicity of operation and control, silence and freedom from mechanical annoyances, which brought it favorably to the attention of motorists, but, as the original drawbacks, such as insufficient mileage and lack of carrying capacity, were overcome, it began to be looked upon with more and more interest.

This interest has grown to such an extent that electric automobile manufacturers are constantly asked such questions as: Are electric suits for any service except city driving? Is it safe to run beyond city streets? How far will the average car run on a battery charge? These questions have all been satisfactorily answered by practical test runs and reliability trips which have demonstrated in the most convincing manner that the modern "electric" is a practical motor car which within its mileage radius may be driven over any roads considered suitable for an automobile.

In 1909, a Detroit Electric stock car was driven from Detroit to Atlantic City, a distance of 1060 miles, entirely on its own power. The car averaged 86 miles per day and the trip was accomplished without mishap. Later in the same year, a Detroit Electric was entered in the Munsey Tour from Washington to Boston. An official observer accompanied the car which completed the run of 671 miles in six days without mechanical trouble or broken parts. More recently, other notable test runs have been made, such as the 1000-mile Ideal Tour through New England and the White Mountains, and the climbing of Mt. Washington to a height of over 6000 feet.

The purpose of the runs just described was not to prove that the *Detroit Electric* is a touring car, but rather to show that it is built to stand the severest driving conditions, and further that its mileage capacity is sufficient and to spare for a full day's run.

The question of mileage is one on which much may be said. The power in an electric vehicle is, of course, all stored in the battery. There are only a given number of electric units available and their mileage producing ability in a given car depends largely on the roads over which the car is driven.

Naturally it takes more power to push through sand and up hills than it does to travel hard smooth pavement, so it follows that the harder, smoother, and more level the roads, the greater the mileage will be on one discharge of the battery.

Mileage is also directly affected by the mechanical and electrical construction of the vehicle itself. It takes a certain amount of power to move every load on wheels. This is true whether the load under consideration is a child's carriage or an automobile. The freer the movement of the wheels and the better the distribution of weight, the easier the load will move, no matter what the means of propulsion. How important it is, then, that the bearings should be of the best and that the weight should be evenly balanced between the two axles. In the *Detroit Electric* imported Hess-Bright and Timken High Efficiency Roller Bearings are used throughout, and the matter of weight distribution is handled with mathematical accuracy. The result is that the actual power required to move the car has been reduced to a minimum.

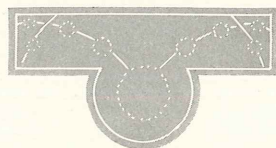
Another problem of electric vehicle builders is to use with the greatest possible effectiveness, the energy in the storage battery as a means of propulsion. First the electric energy must be turned into mechanical power by the motor and then transmitted to the driving wheels. The motor and transmission mechanism are known as the power plant and it is obvious that the simpler and more efficient the power plant, the more economical will be the use of the energy stored in the battery and the greater the actual driving power obtained from it. In the *Detroit Electric* the power is carried to the wheels without waste through the "Chainless" Shaft Drive—a patented feature which has already been described.

It is also true that mileage is effected by both batteries and tires. Tires can be made which offer very little road resistance to the vehicle, but they are very short lived. Batteries composed of thin plates can also be used which temporarily have high capacity, but they too, soon wear out. In considering the factors within the vehicle itself which have an influence on mileage, it is assumed that both batteries and tires of approved durability are used. In order to be thoroughly satisfactory an electric car must have ample mileage capacity, but it also must be thoroughly practical. In this connection, an additional word may be said regarding tires. All pneumatic tires are not suitable

for use on an electric car. Neither are all solid or cushion tires. The utmost in tire satisfaction will be secured by consulting the car manufacturer regarding the problems involved.

The impression is quite general that the electric is primarily a woman's car. It is an ideal type of vehicle for a woman's use, because of its simplicity of operation, making the feminine driver entirely independent of the chauffeur, but its greatest promise of usefulness is fulfilled as a family car. The electric is also being regarded with more and more favor each season by the business and professional man, who wishes to be punctual in keeping his appointments, and at the same time retain his normal well-groomed appearance.

For shopping, the theatre, afternoon calls and short country runs, the electric automobile, without any question, occupies a field all its own. Its many advantages are becoming better known each year, and it is rapidly taking its proper place as a practical motor car which will carry one on business or social errands about town or suburbs as far as necessity or pleasure will ever require.



LETTER received from THOS. A. EDISON, giving the Anderson Electric Car Co., manufacturers of the Detroit Electric, the exclusive rights to use the Edison battery in Electric Pleasure Cars for 1912.

CABLE ADDRESS: "EDISON, NEW YORK"

Edison Storage Battery Co.

THOS. A. EDISON

Orange, N.J., U.S.A.

October 14, 1911

Anderson Electric Car Company,
Detroit, Mich.

Gentlemen:-

Confirming our understanding, we agree to sell the proportion of our output of batteries that we have reserved for pleasure vehicles for 1912 to you exclusively, provided the present high grade construction of your "Detroit Electric" cars, motors and other appliances is maintained, reserving the right to supply from your quota batteries to Col. Bailey and Gen. Healey, because of Mr. Edison's personal promises to them. And we guarantee that the battery for four years will be capable of developing its rated capacity, making it safe for you to extend the guarantee to five years.

Yours very truly,

EDISON STORAGE BATTERY COMPANY,

By Thomas A. Edison
President.

Accepted:

ANDERSON ELECTRIC CAR COMPANY.

By H. C. Anderson
President.

THE information has been given in the preceding pages that *Detroit Electrics* may be equipped with either the Thos. A. Edison battery of nickel or steel, or standard lead batteries. The subject of batteries is, however, such a broad one, that it has been deemed best to treat it in a separate booklet, together with practical facts pertaining to charging apparatus, the construction and life of batteries, cost of maintenance, etc. Write for Booklet No. 41A, if you have not already received a copy.

Direct Factory Branches



One Important Arm of Detroit Electric Service

Page Thirty-six

Service Department

THE Service Department of the Anderson Electric Car Co. has been developed expressly for the convenience of *Detroit Electric* owners. Expert information and advice regarding the proper care of cars is furnished owners free of cost. A traveling inspection service is also maintained for the purpose of helping our dealers when necessary, and also assisting individual owners living in towns where there are no *Detroit Electric* agents.

In all the larger cities in the United States and Canada there is either a Direct Factory Branch or a *Detroit Electric* agency. Complete facilities are maintained at these points for the proper care and inspection of *Detroit Electrics*. All the Factory Branches and many of the Agencies carry in stock a complete line of spare parts which is frequently a great convenience in cases of emergency. In addition to the factory branches which are illustrated on the opposite page, we have dealers in 150 cities.

Page Thirty-seven

Price List 1912 Models

Prices subject to change without notice

| | |
|-----------------------------------------------------------------------------------------|--------|
| Model "25" Extension Brougham; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$2800 |
| With Edison Battery..... | 3410 |
| Model "26" Extension Brougham; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$2800 |
| With Edison Battery..... | 3410 |
| Model "27" Brougham; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$2700 |
| With Edison Battery..... | 3310 |
| Model "28" Town Car; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$3500 |
| With Edison Battery..... | 4400 |
| Model "29" Limousine; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$3850 |
| With Edison Battery..... | 4750 |
| Model "30" Roadster; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$2200 |
| With Edison Battery..... | 2810 |
| Model "31" Two-Passenger Coupe, with Third Person Seat; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$2600 |
| With Edison Battery..... | 3210 |
| Model "32" Victoria; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$2000 |
| With Edison Battery..... | 2610 |
| Model "14" Four-Passenger Victoria; Direct Shaft Drive "Chainless"— | |
| With Standard Lead Battery..... | \$2200 |
| With Edison Battery..... | 2810 |
| Model "25" Body Complete..... | \$1000 |
| Model "26" Body Complete..... | 1000 |
| Model "27" Body Complete..... | 950 |
| Model "30" Body Complete..... | 450 |
| Model "31" Body Complete..... | 900 |
| Model "32" Body Complete..... | 450 |
| Model "14" Body Complete..... | 450 |
| Imported Novelty Cloths, Whipcords or Goatskin Upholstering on any Model..... | 40 |

Page Thirty-eight

Warranty

WE warrant all electric vehicles manufactured by this Company for one year following the date of shipment, based upon the invoice date.

This warranty is limited to the replacement at our factory of all parts giving out under normal service in consequence of defective material or workmanship. If the circumstances do not permit that the work be executed in our factory, this warranty is limited to the shipment, without charge, of the parts intended to replace those acknowledged to be defective.

It is, however, understood that we make no warranty whatever regarding pneumatic tires or lead batteries.

The condition of this warranty is such that if the electric vehicle to which it applies is altered or repaired outside of our factory, our liability under this warranty shall cease. The purchaser understands and agrees that no warranty of the vehicle is made or authorized to be made by this Company other than herein above set forth.

Page Thirty-nine

THE CORDAY & GROSS COMPANY, CLEVELAND