



1912  
100

*Rauch & Lang  
Electrics*



Rauch & Lang  
Electrics







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THE RAUCH & LANG CARRIAGE CO.  
Cleveland, Ohio, U. S. A.  
Issued January Fifth



*Rauch & Lang  
Electrics*



THE RAUCH & LANG CARRIAGE CO

CHARLES RAUCH,      CHARLES L. F. WIEBER,  
*President*              *Vice Pres. & Gen. Mgr.*

CHARLES E. J. LANG, *Sec'y-Treas.*

CLEVELAND, OHIO  
2180 West 25th St.









# Reputation

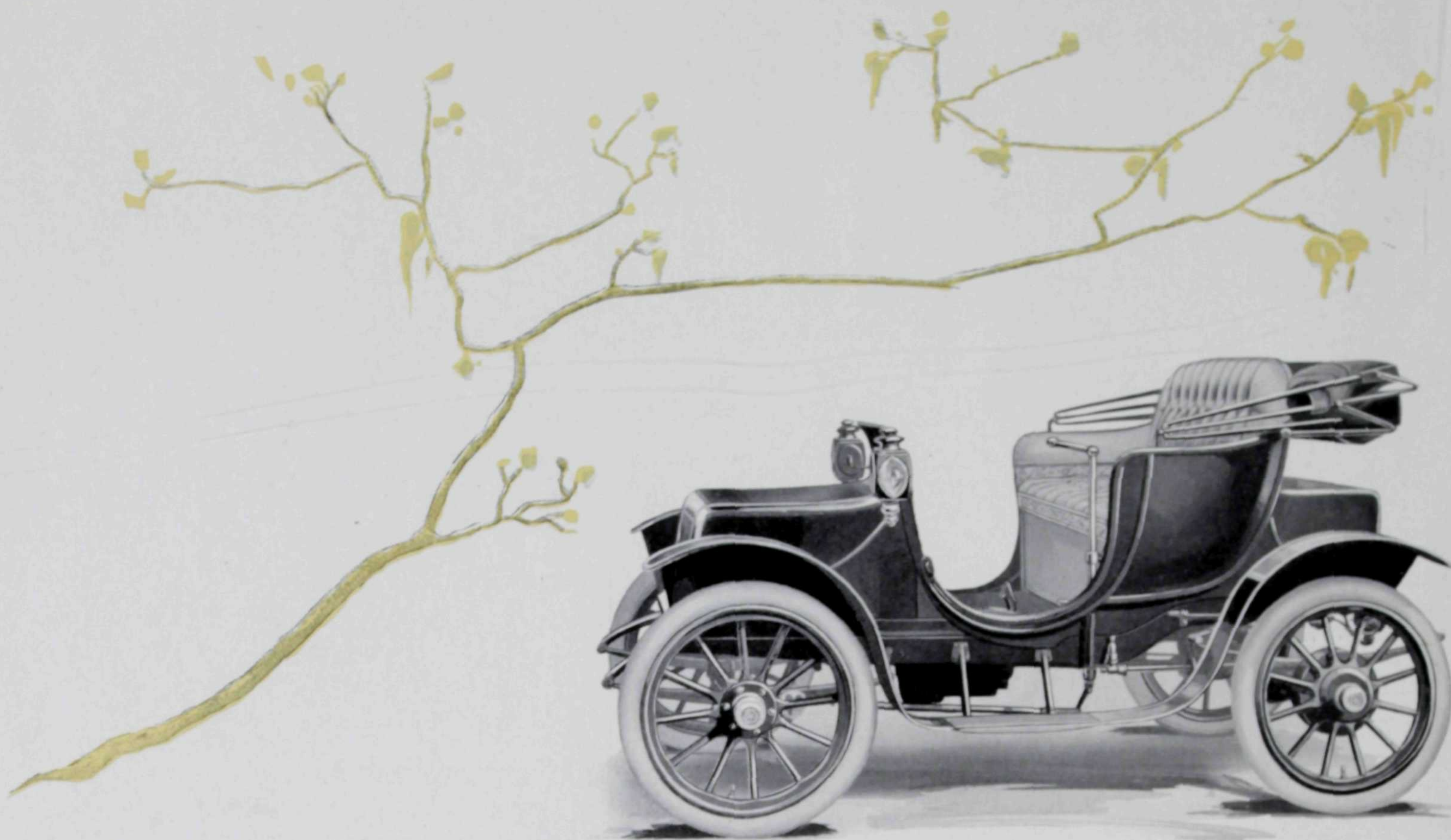
**T**HE Rauch & Lang Carriage Company for three score years has been working to solve vehicle problems—to make your purchase more satisfactory—to make you rejoice in the ownership of a vehicle. This means constant endeavor. In the Rauch & Lang Electrics you have the fulfillment of your ideals—because they are as near perfection as it is possible to build an electric pleasure conveyance.

Each of the electric pleasure cars shown here has as its greatest asset—Service.

The Rauch & Lang reputation has been built upon this service. For sixty years those who have purchased conveyances from this company have found the Rauch & Lang quality of service a most valuable part of each purchase.

Perfection of construction, coupled with reputation, should make it easy for you to decide that the Rauch & Lang is pre-eminently the car for your use.





STANHOPE  
Wheel Base, 83½"

**C**HASSIS No. 41—*Shaft Drive*. Wheels and Tires, 32 x 3½" Special Electric Pneumatic. 24 cells 9 M. V. or 24 cells 11 M. V. Hy-Cap - - - - - \$2100.00.

*Chassis No. 43—Shaft Drive*. Wheels and Tires, 32 x 4" Special Electric Pneumatic. 24 cells 11 M. V. or 24 cells 13 M. V. Hy-Cap, \$2250.00

*Chassis No. 425—Shaft Drive*. Wheels and Tires, 32 x 4" Special Electric Pneumatic. 40 cells 9 P. V. or 40 cells 11 P. V. Hy-Cap, \$2350.00

Exide or Exide Hy-Cap Batteries Standard Equipment. "Ironclad" Exide Batteries furnished at additional cost.

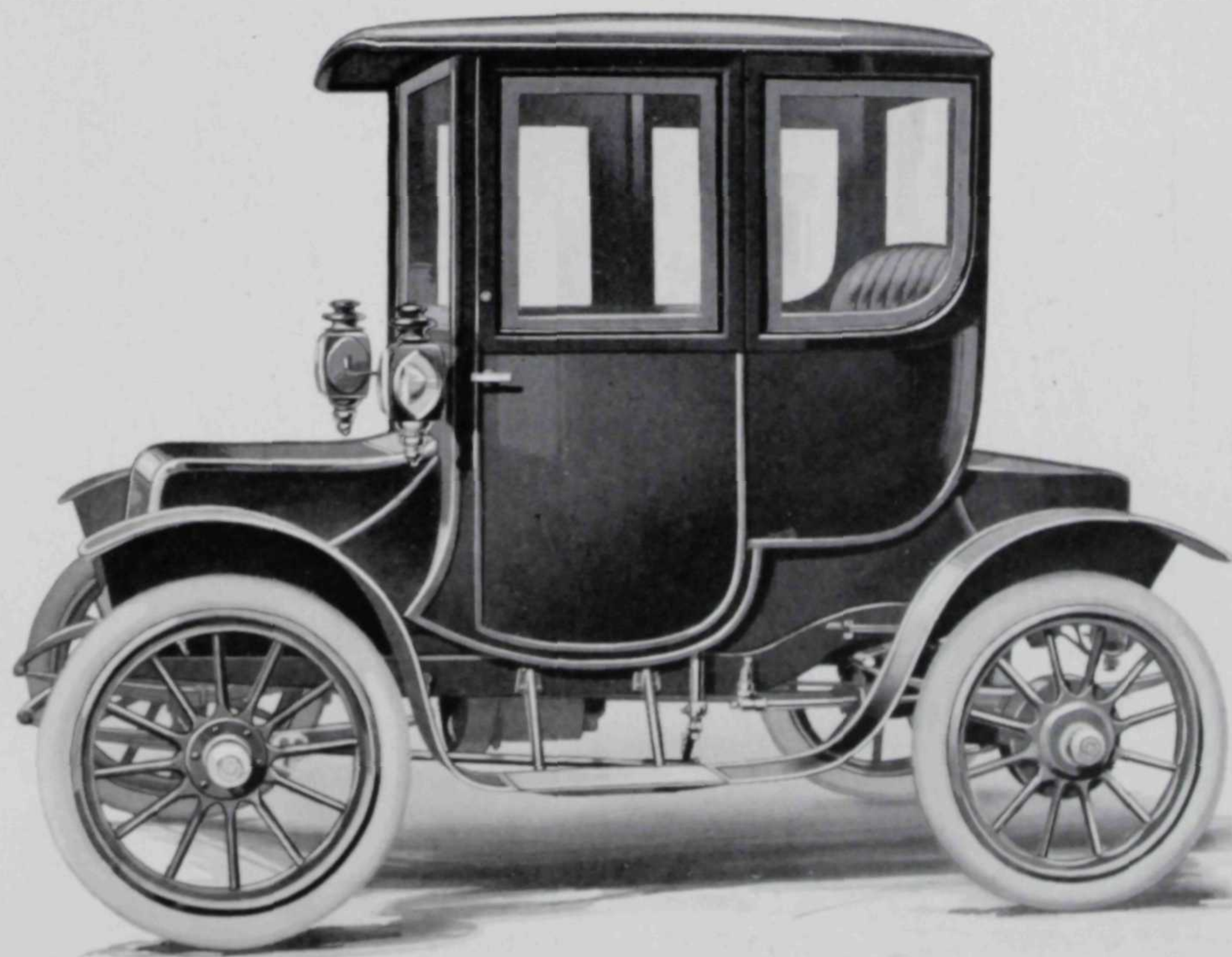


CHASSIS No. 41—*Shaft Drive.* Wheels and  
Tires, 32 x 3½" Special Electric Pneumatic.  
24 cells 9 M. V. or 24 cells 11 M. V. Hy-  
Cap - - - - - \$2400.00

Chassis No. 43—*Shaft Drive.* Wheels and Tires,  
32 x 4" Special Electric Pneumatic. 24 cells  
11 M. V. or 24 cells 13 M. V. Hy-Cap, \$2550.00

Chassis No. 425—*Shaft Drive.* Wheels and Tires,  
32 x 4" Special Electric Pneumatic. 40 cells  
9 P. V. or 40 cells 11 P. V. Hy-Cap, \$2650.00

Exide or Exide Hy-Cap Batteries Standard  
Equipment. "Ironclad" Exide Batteries fur-  
nished at additional cost.



COUPE  
Body Design Copyrighted  
Wheel Base, 83½"





DEMI-BROUGHAM  
 Body Design Copyrighted  
 Wheel Base, 83½"

CHASSIS No. 43—*Shaft Drive*. Wheels and  
 Tires, 32 x 4" Special Electric Pneumatic.  
 24 cells 11 M. V. or 24 cells 13 M. V. Hy-  
 Cap - - - - - \$2700.00

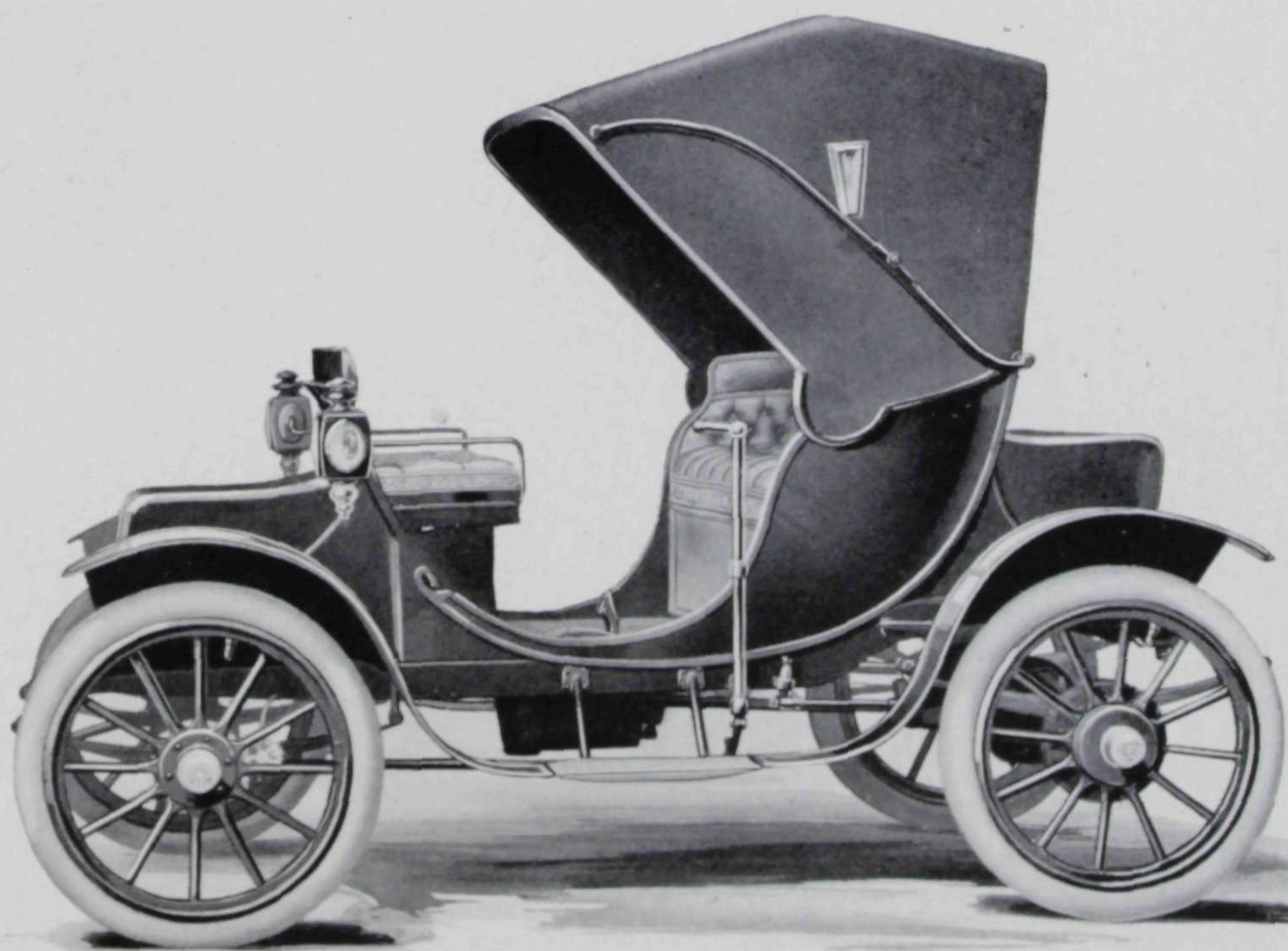
Chassis No. 425—*Shaft Drive*. Wheels and Tires,  
 32 x 4" Special Electric Pneumatic or 34 x 4"  
 Rauch & Lang Motz High Efficiency Cushion.  
 40 cells 9 P. V. or 40 cells 11 P. V. Hy-  
 Cap - - - - - \$2800.00

Exide or Exide Hy-Cap Batteries Standard  
 Equipment. "Ironclad" Exide Batteries fur-  
 nished at additional cost.





CHASSIS No. 44—*Enclosed Chain.* No. 45  
—*Shaft Drive.* Wheels and Tires, 34 x 4"  
Special Electric Pneumatic or 36 x 4" Rauch  
& Lang Motz High Efficiency Cushion. 24 cells  
13 M. V. or 24 cells 15 M. V. Hy-Cap, \$2450.00  
Chassis No. 444—*Enclosed Chain.* No. 445—  
*Shaft Drive.* 40 cells 9 M. V. or 40 cells 11 M. V.  
Hy-Cap - - - - - \$2550.00  
Exide or Exide Hy-Cap Batteries Standard  
Equipment. "Ironclad" Exide Batteries fur-  
nished at additional cost.



VICTORIA (Vis à Vis)  
Body Design Copyrighted  
Wheel Base, 91"





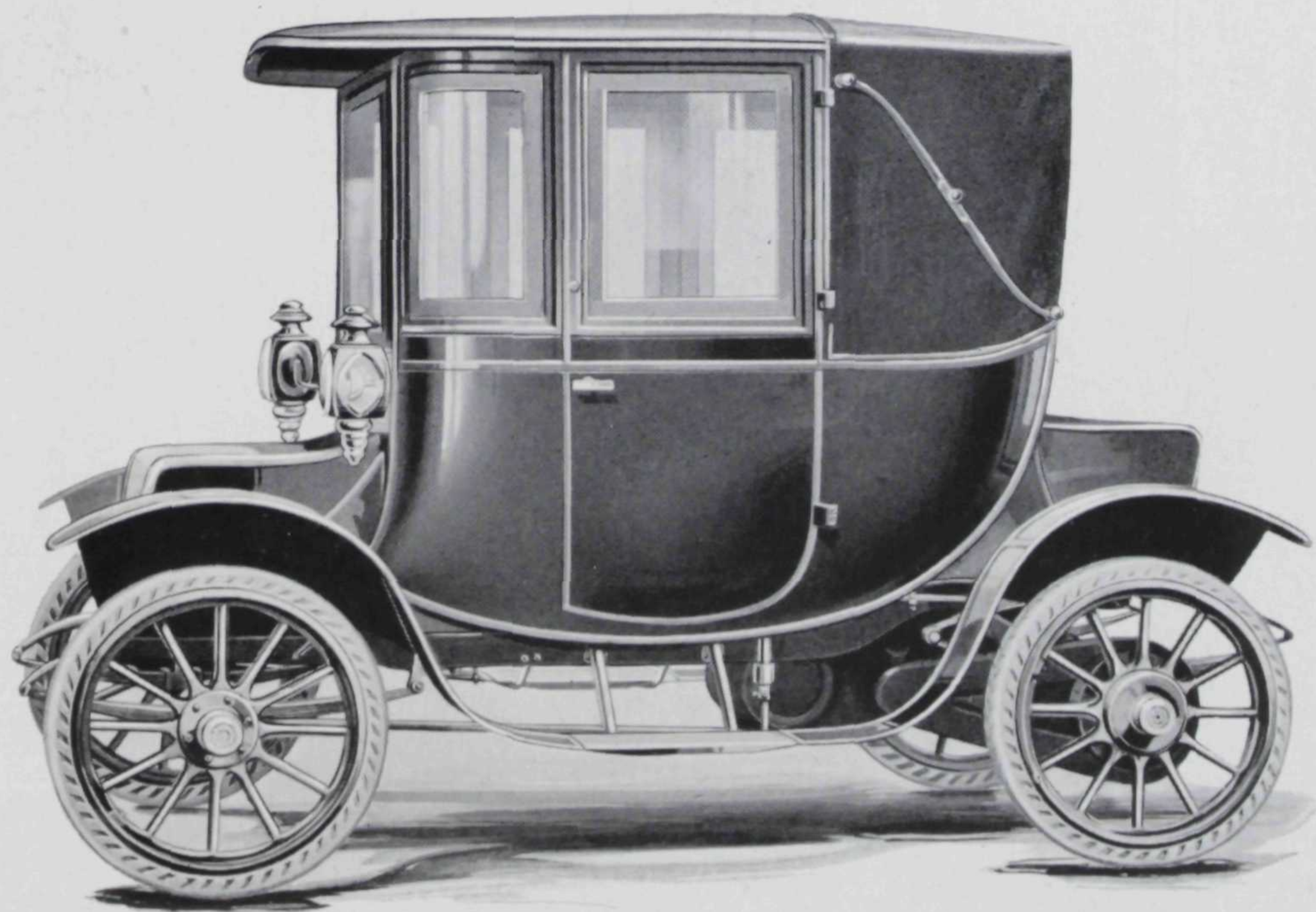
BROUGHAM  
 Body Design Copyrighted  
 Wheel Base, 91"

CHASSIS No. 44—*Enclosed Chain.* No. 45  
 —*Shaft Drive.* Wheels and Tires, 34 x 4"  
 Special Electric Pneumatic or 36 x 4" Rauch  
 & Lang Motz High Efficiency Cushion. 24 cells  
 13 M. V. or 24 cells 15 M. V. Hy-Cap, \$2800.00  
 Chassis No. 444—*Enclosed Chain.* No. 445—  
*Shaft Drive.* 40 cells 9 M. V. or 40 cells 11 M. V.  
 Hy-Cap - - - - - \$2900.00  
 Exide or Exide Hy-Cap Batteries Standard  
 Equipment. "Ironclad" Exide Batteries fur-  
 nished at additional cost.



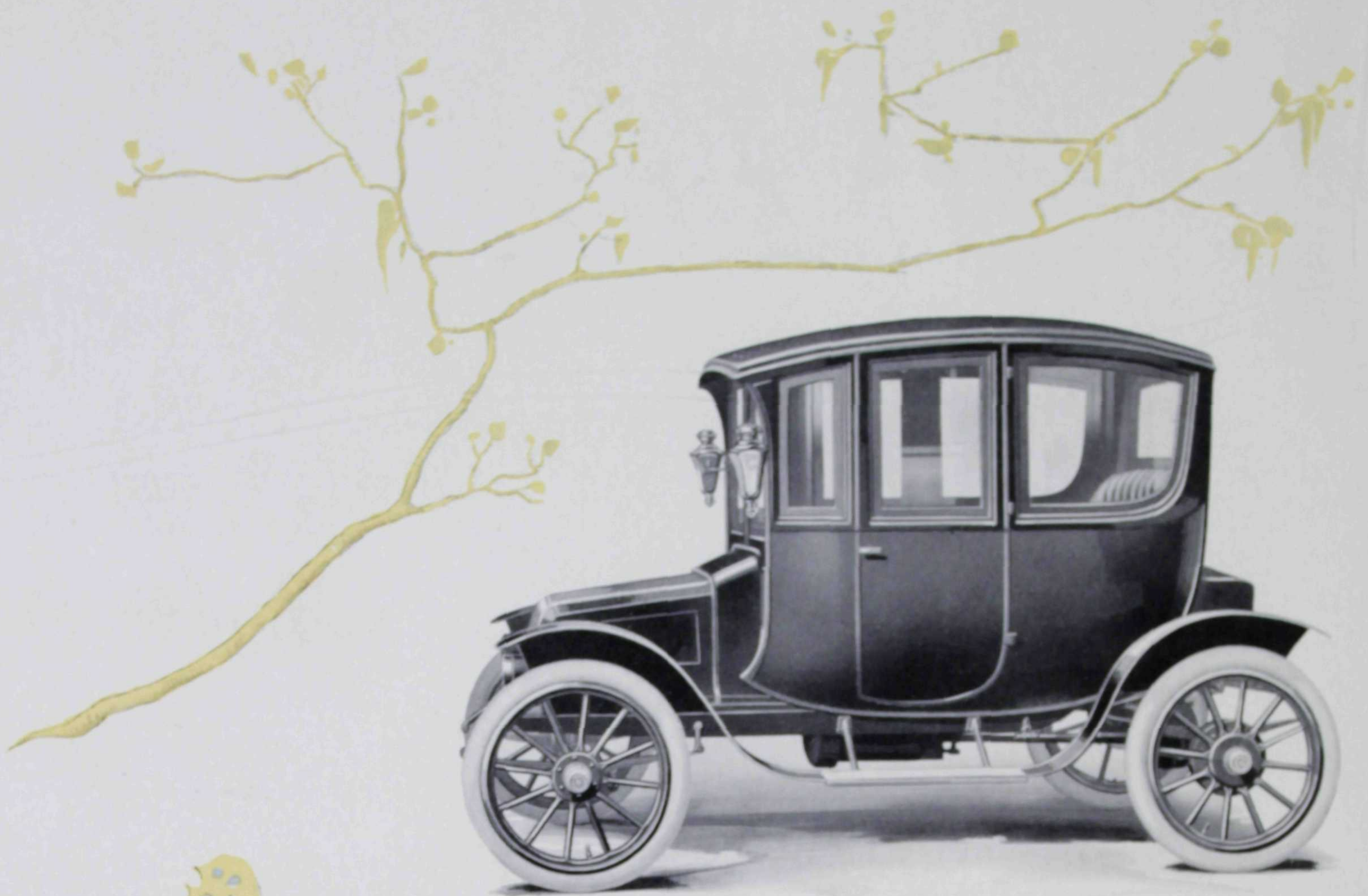


CHASSIS No. 44—*Enclosed Chain.* No. 45  
 —*Shaft Drive.* Wheels and Tires, 34 x 4"  
 Special Electric Pneumatic or 36 x 4" Rauch  
 & Lang Motz High Efficiency Cushion. 24 cells  
 13 M. V. or 24 cells 15 M. V. Hy-Cap, \$3000.00  
 Chassis No. 444—*Enclosed Chain.* No. 445—  
*Shaft Drive.* 40 cells 9 M. V. or 40 cells 11 M. V.  
 Hy-Cap - - - - - \$3100.00  
 Exide or Exide Hy-Cap Batteries Standard  
 Equipment. "Ironclad" Exide Batteries fur-  
 nished at additional cost.



LANDAULETTE  
 Body Design Copyrighted  
 Wheel Base, 91"





COACH  
Body Design Copyrighted  
Wheel Base, 109"

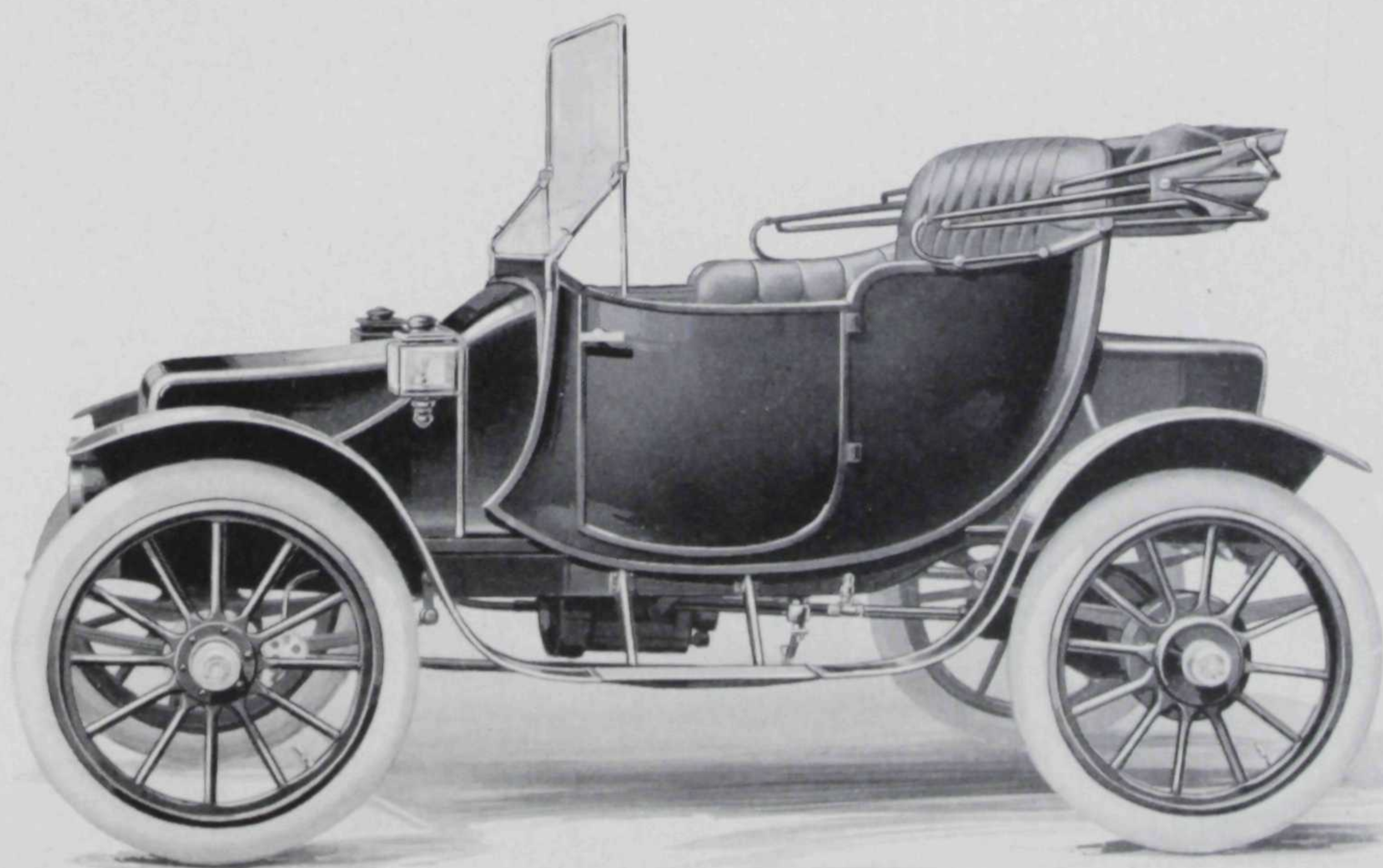
CHASSIS No. 454—*Enclosed Chain.* No. 455  
—*Shaft Drive.* Wheels and Tires, 34 x 4"  
Special Electric Pneumatic or 36 x 4" Rauch  
& Lang Motz High Efficiency Cushion. 40 cells  
9 M. V. or 40 cells 11 M. V. Hy-Cap, \$3800.00  
Two Side Lamps, Two Headlights.

Exide or Exide Hy-Cap Batteries Standard  
Equipment. "Ironclad" Exide Batteries fur-  
nished at additional cost.



CHASSIS No. 444—*Enclosed Chain.* No. 445  
—*Shaft Drive.* Wheels and Tires, 34 x 4"  
Special Electric Pneumatic or 34 x 4" Rauch  
& Lang Motz High Efficiency Cushion. 40 cells  
9 M. V. or 40 cells 11 M. V. Hy-Cap, \$2600.00  
Two Side Lamps, Two Headlights.

Exide or Exide Hy-Cap Batteries Standard  
Equipment. "Ironclad" Exide Batteries fur-  
nished at additional cost.



ROADSTER  
Body Design Copyrighted  
Wheel Base, 91"





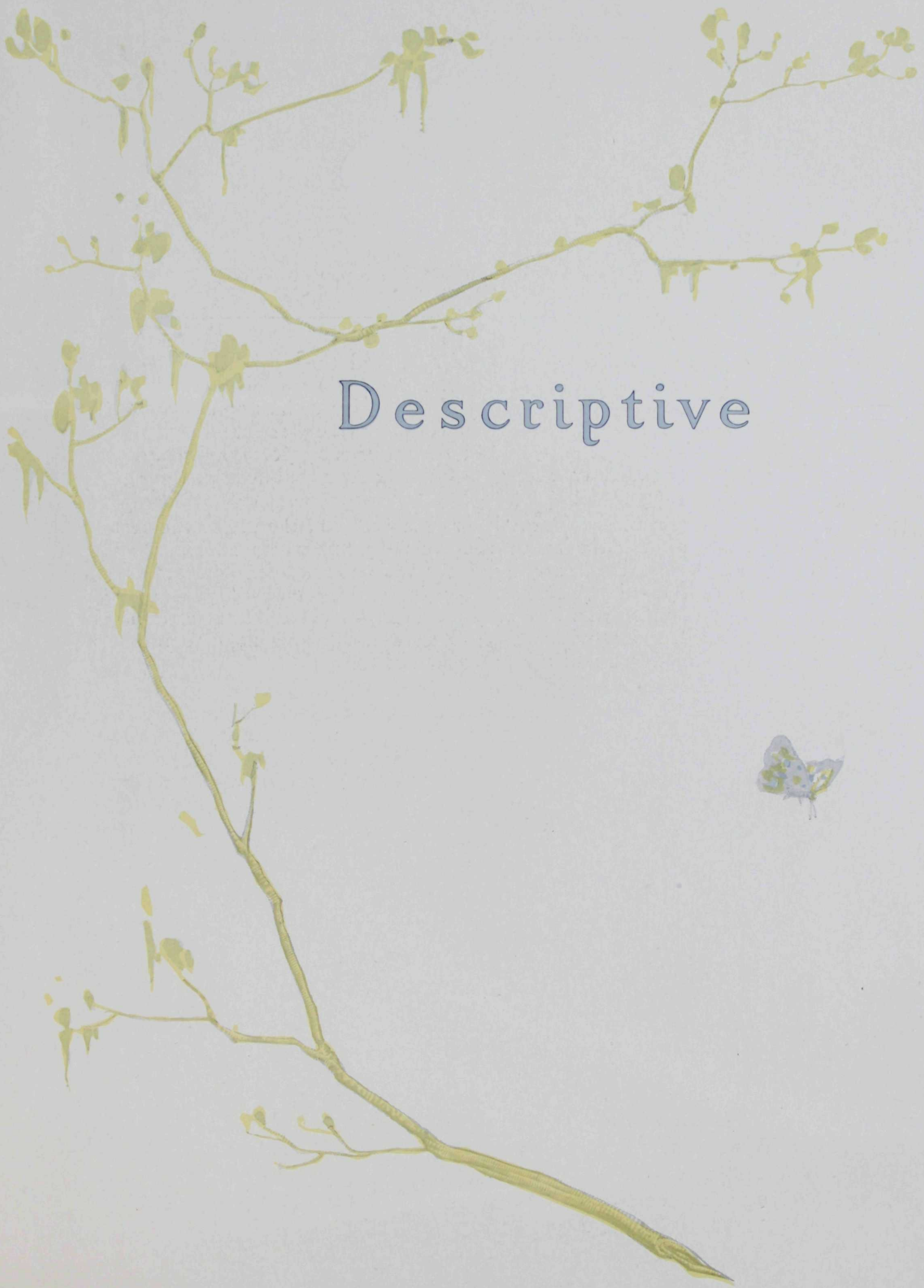
CLUB ROADSTER  
Body Design Copyrighted  
Wheel Base, 91"

**C**HASSIS No. 444—*Enclosed Chain.* No. 445  
—*Shaft Drive.* Wheels and Tires, 34 x 4"  
Special Electric Pneumatic or 34 x 4" Rauch  
& Lang Motz High Efficiency Cushion. 40 cells  
9 M. V. or 40 cells 11 M. V. Hy-Cap, \$2800.00  
Two Side Lamps, Two Headlights.

Exide or Exide Hy-Cap Batteries Standard  
Equipment. "Ironclad" Exide Batteries fur-  
nished at additional cost.



Descriptive





*Rauch & Lang  
Electrics*



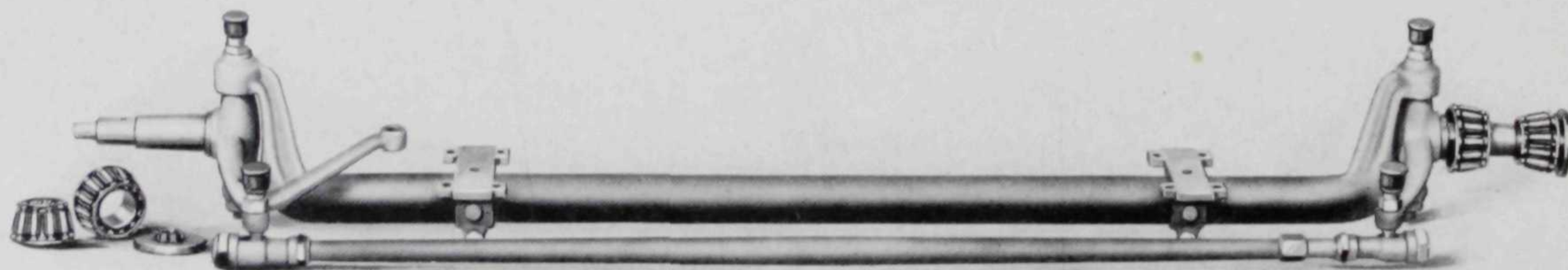
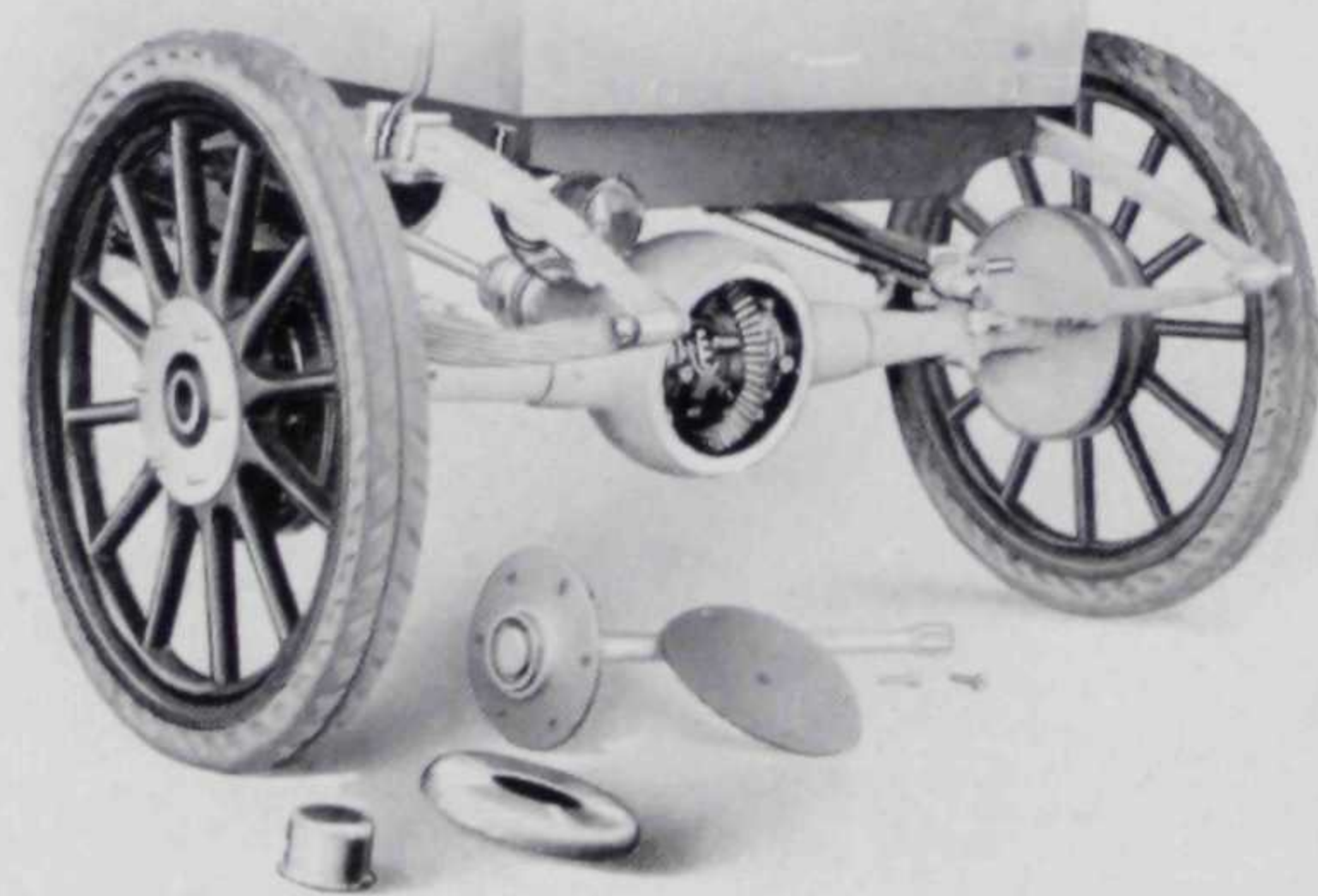
**T**HE closing of the year 1911 and the beginning of 1912 marks another season of Rauch & Lang success. Since the very first it has been the policy of its founder and of his successors to make their product the best, and now on looking into the past, over a period of sixty years, a gratifying series of successful accomplishments and of public approval can be reviewed.

From the beginning it was realized that the use of the best material, together with the most skillful workmanship, does not necessarily create a product that will be considered of the highest quality, nor meet the increasing demands year after year of those who buy only the best, for there is that essential thing—service, without which no one can long hope to retain the confidence and the patronage of the public.

Service guarantees to the owner the uninterrupted use of his car. It is certain that the longer the vehicle has been in commission and the more it has become a necessity and the less a luxury, the more keenly the owner feels its temporary loss. After a period of time there may be a demand for repair

parts and it must bring a feeling of security to the owner to know that the concern that manufactured the car and not only assembled, but makes all its parts, is standing behind its product and is ready to make prompt delivery of such parts at a reasonable cost.

Everyone can see that the growth of the automobile industry has been astonishing; in fact, there is nothing in the world's



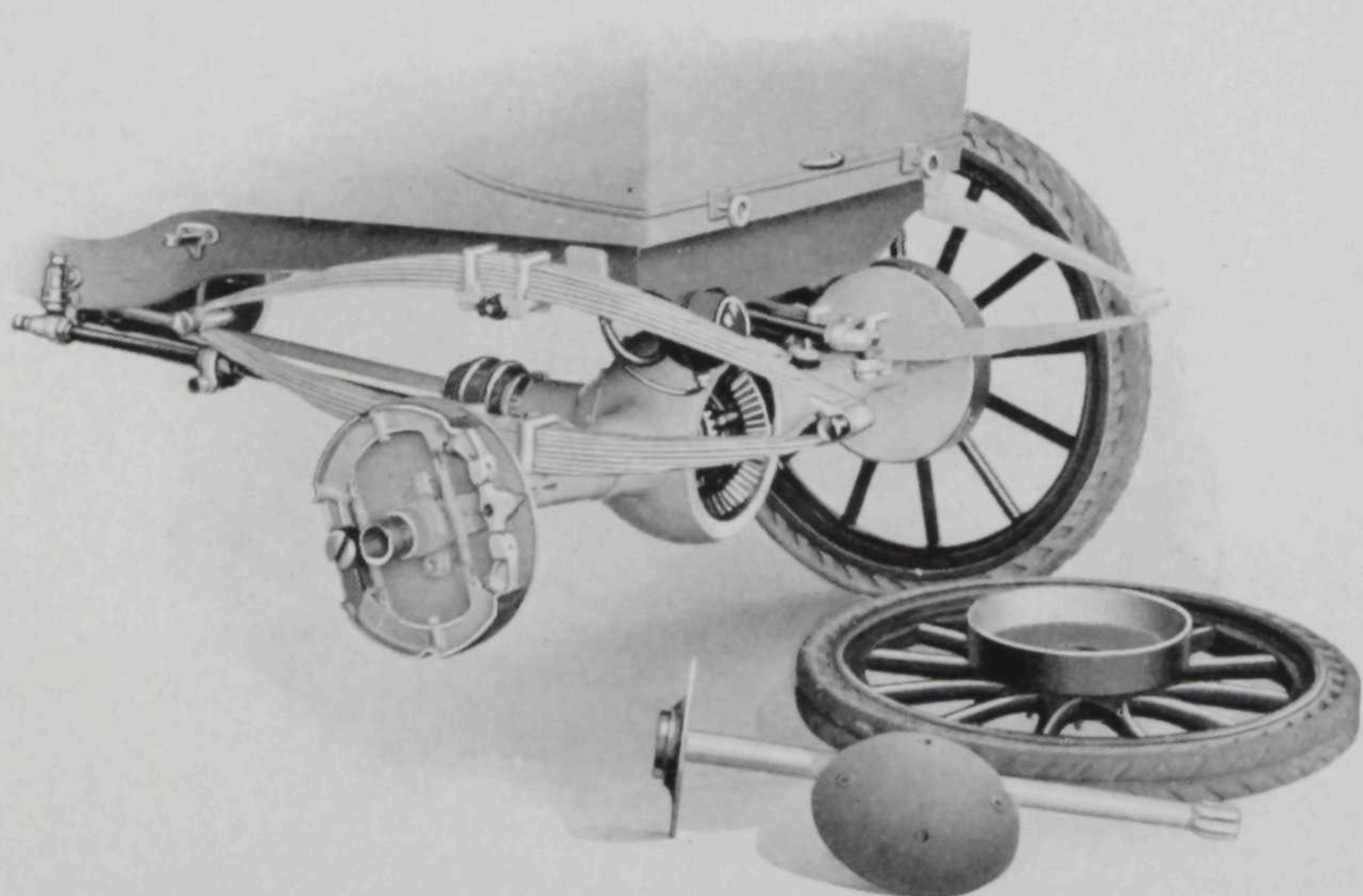


history to compare with it. This has necessitated a rapid change in methods of manufacture, of propulsion and in styles, to such an extent that the models of one year were sometimes radically different from those of the year before. In fact, with some builders it has resulted in the creation of freaks—freaks in appearance, in speed and in construction. This has brought about a rapid ageing and a correspondingly rapid fall in value when a car came into the market for resale, so that another point, that of design, is seen to be of great importance. The building of the product of this company along conservative lines, both as to style and construction, and the minor consideration given to high speed and extreme lightness where the only results can be short life, have contributed as much as good material, skilled workmanship and service to Rauch & Lang success. We need only point to the fact that our body design is not far different from that used in our earliest electrics, the same lines, the same general appearance, while some other makes have been changed so radically that there is no resemblance between their earlier and later types.

We do not aim particularly to bring out yearly models. We reserve the right to make improvements at any time and to apply them as soon as possible after their conception and test. The catalog appearing annually at about this time is merely a summary of the advances made in the preceding twelve months.

The newest models which are making their appearance late in 1911 differ in style from their immediate predecessors in being larger and lower. The increased size is in answer to the general demand for wider and deeper seats and more foot room. The small extension Coupe or the Demi-Brougham of these models has grown almost to the size of last year's large extension. In making the car lower the riding qualities and appearance have been improved.

The bodies are constructed along lines adopted a year ago. A hardwood framework supports the sheet aluminum panels and steel hoods, making the occurrence of checks utterly impossible.





A much wider range in the selection of trimmings is open to the purchaser. Besides the shades of broadcloth and leather which have been considered standard for years, there is a wide assortment of Bedford cords and fancy cloths which have lately become very popular. With this variety of materials the painstaking work which is characteristic of Rauch & Lang product, produces results which are harmonious and elegant.

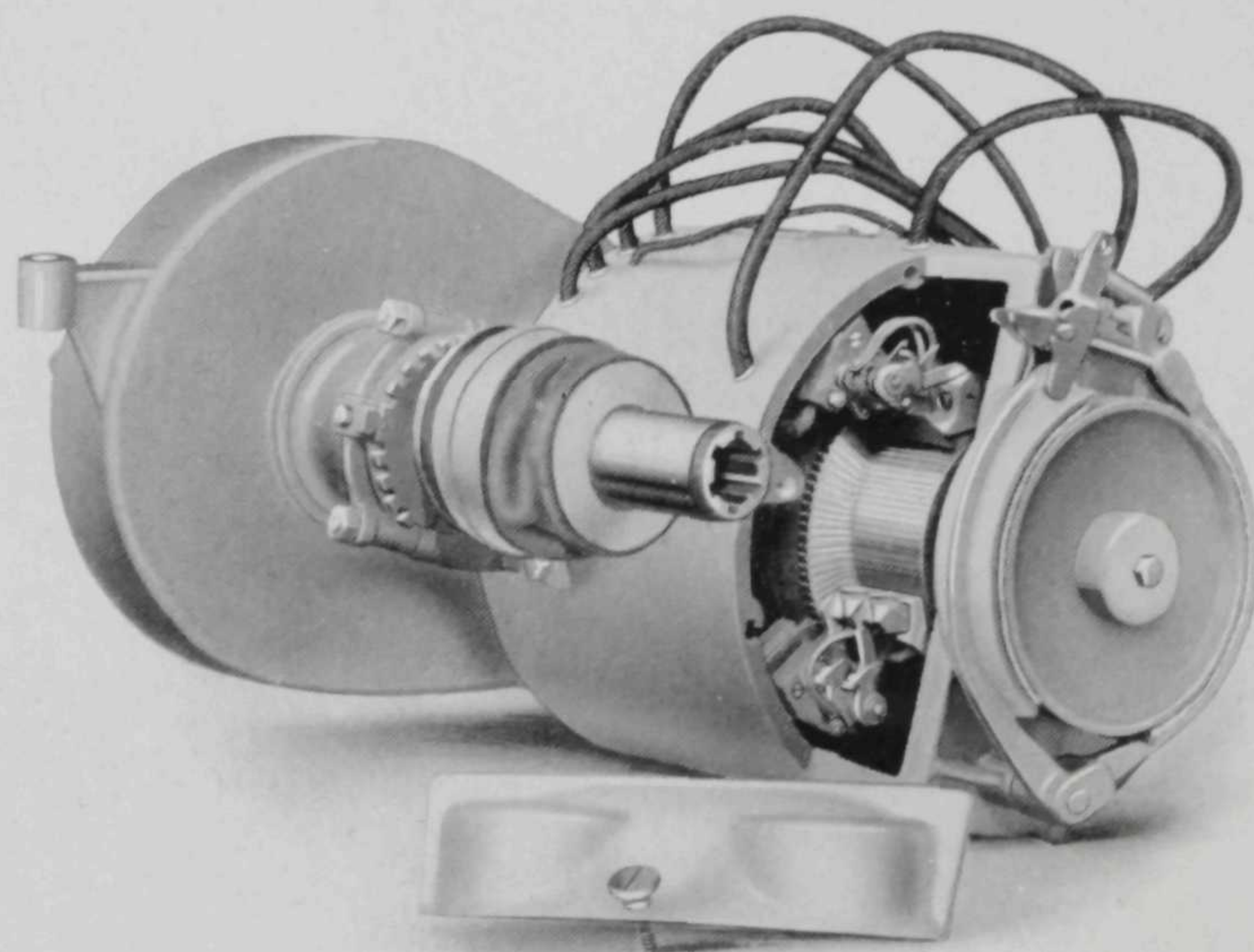
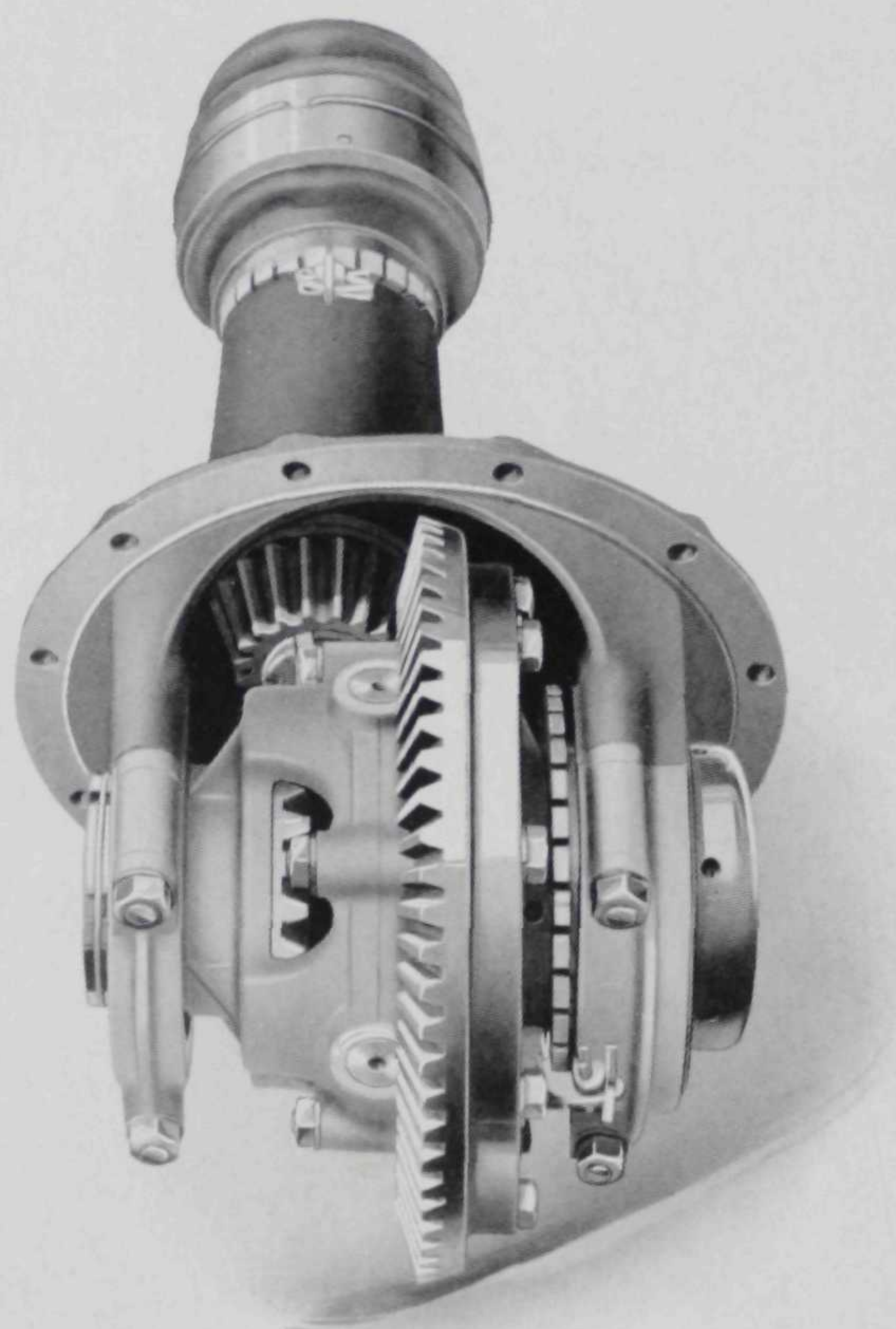
The accessories, such as toilet case, lamp switches and the like, have been given the final touch to bring them up to the level of excellence of the balance of the car and to make them all that can be desired.

A very important feature is our new side lamp, of the same general appearance as heretofore. We have succeeded by the use of a special reflector and suitable bulb to produce a powerful searchlight effect without introducing the additional headlight with its objectionable appearance and its waste of current.

The car mechanically is much the same as a year ago, with the addition of such adjustable features as experience shows are advisable. An electric is so much quieter than a gasoline-driven machine that any slight rattle becomes noticeable and adjustment should be provided at all points where a moving joint is subjected to serious strains. While it is found that such construction adds somewhat to the weight and cost of the car, the owner gets full pay in satisfaction, low upkeep cost and continuity of service.

The steel frame is of the type that has been standard with Rauch & Lang for seven years. It has a four-inch drop and is of deep section, amply braced.

The spring suspension of the shaft-driven car has all the desirable elements of flexibility and easy riding besides securing parallel action and the elimination of torsional strains in the rear axle. To further secure flexibility the driving from the motor unit is through two universal joints, thus allowing the axle to practically float—being held in place by the action of the





springs. Special care has been taken to provide extra large, hardened spring bolts, fitted with grease cups integral with the bolt heads. They work in phosphor-bronze bushings, insuring long life and freedom from squeaks.

The rear axle has been designed with a view of securing a particularly rugged and at the same time accurate construction. Heat-treated alloy steel is used in the tubular portion and a strength is secured such that, without permanently yielding and without the use of a truss rod or similar device, the spring seats will support a weight twelve times the largest static load to which it will ever be subjected.

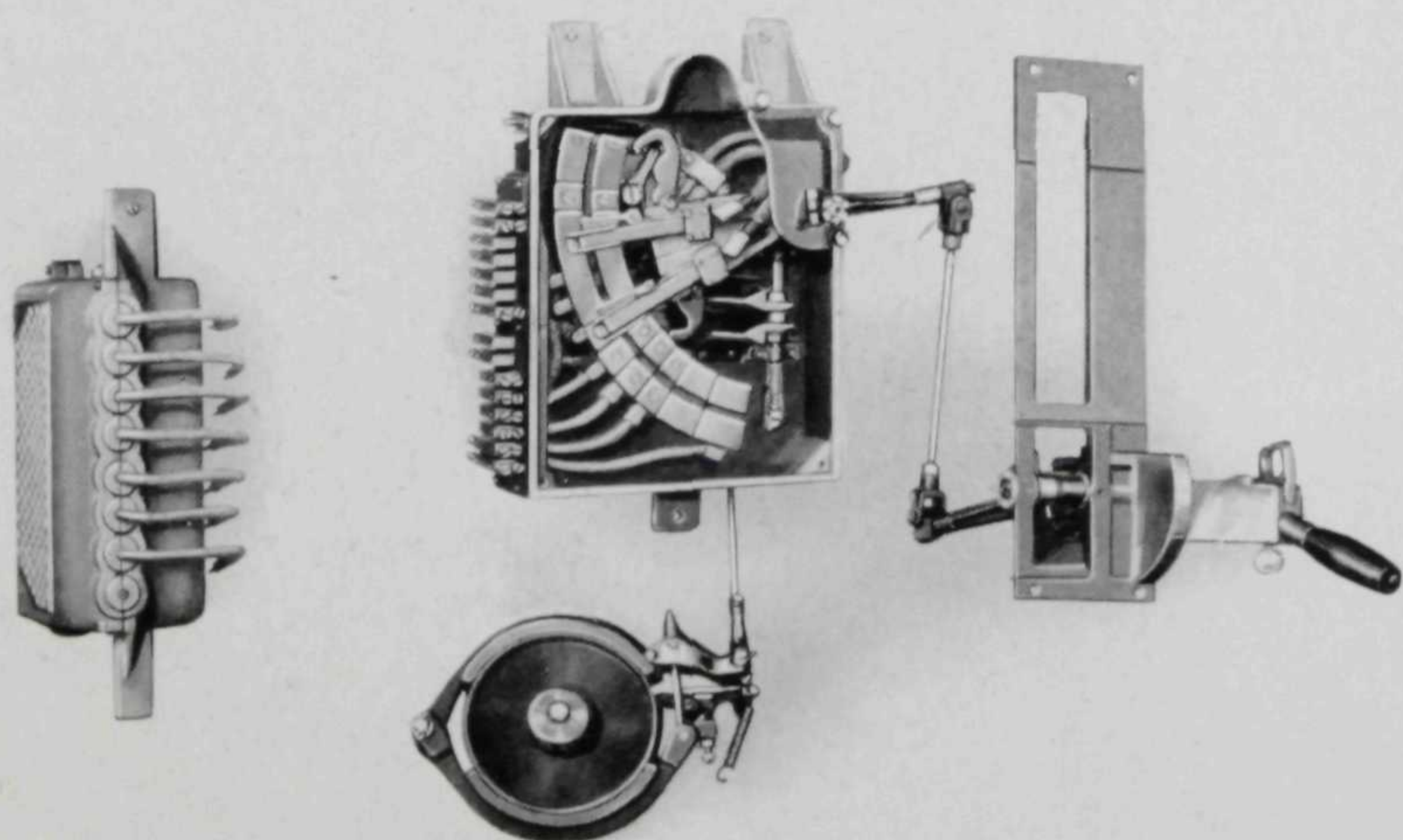
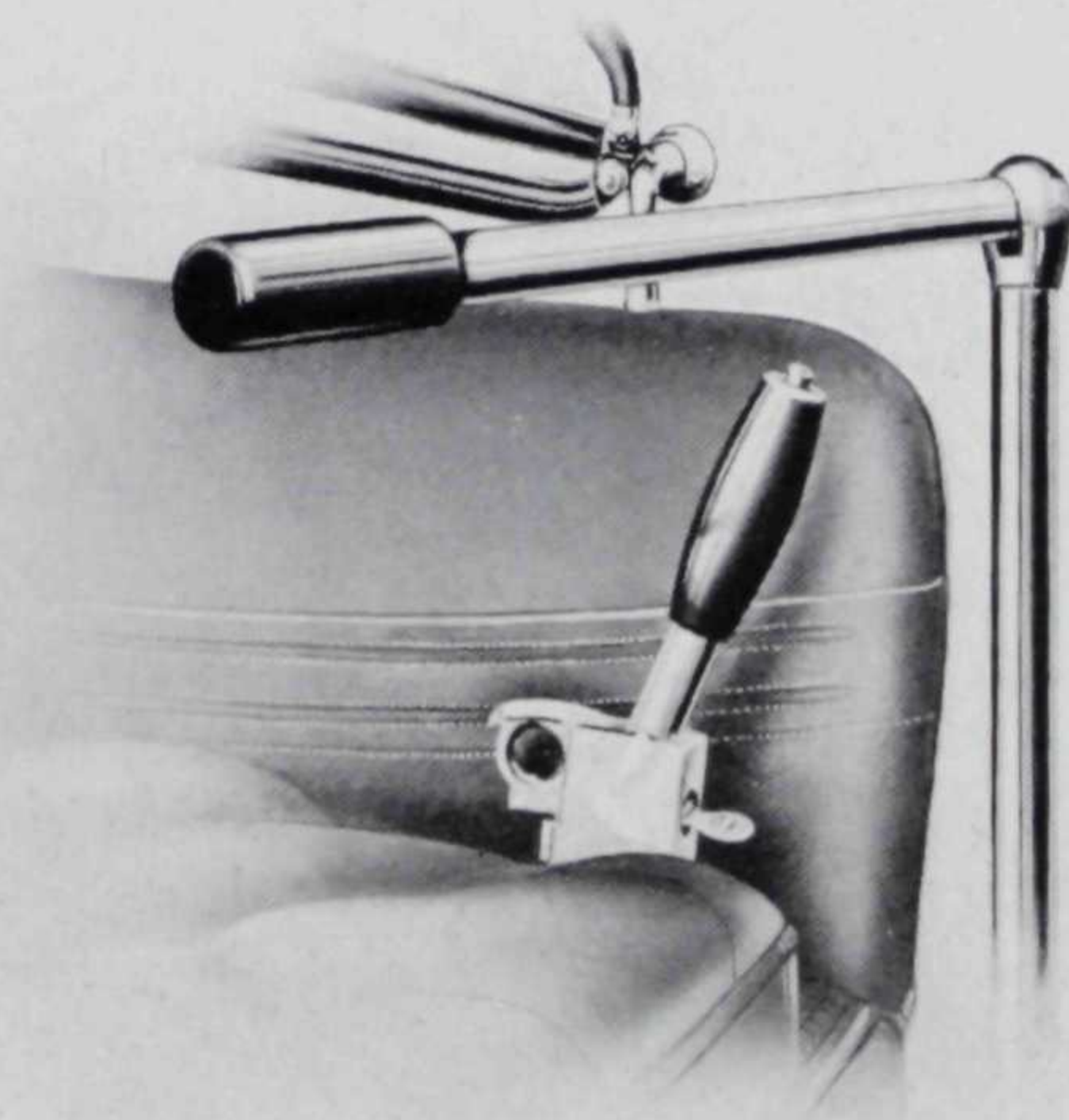
The differential, drive gear and pinion are mounted in a steel carrier that bolts against the front of the axle and is readily removable therefrom. These parts are all mounted on radial and thrust ball bearings, so arranged that all adjustments of mesh can be made by the turning of a nut behind gear and pinion respectively. An opening on the rear of the axle housing permits of access to the interior for inspection.

The drive wheels are each mounted on a large annular bearing seated on the outside of the axle tubing. Against the front of the hub is bolted the flange, which is part of the drive shaft. The drive shaft in turn fits into the differential gear and is driven thereby through six keys or splines. With this construction not only can the differential and gears be removed, but the drive shafts can be taken out of the axle without disturbing the wheels.

Owing to the lowering of the frame and body, the front axle has been given a corresponding drop. It is of the same general construction as heretofore, with ball thrusts in the spindle to make the steering easier.

The steering mechanism has been strengthened by the employment of tubing of special shape. The ball sockets are of new design and the balls themselves are much larger, giving more wear and rendering adjustments easier.

All our cars are built with the idea of being equipped, when called for, with solid





or cushion tires, and with this in view, design, material and treatment, are made to correspond. Alloy steels of various kinds, each suited to its purpose, are used throughout the car; axles, drive shafts, steering spindles and yokes, springs, gears and many other minor parts are thus carefully selected and tested and no pains are spared in their machining and treatment.

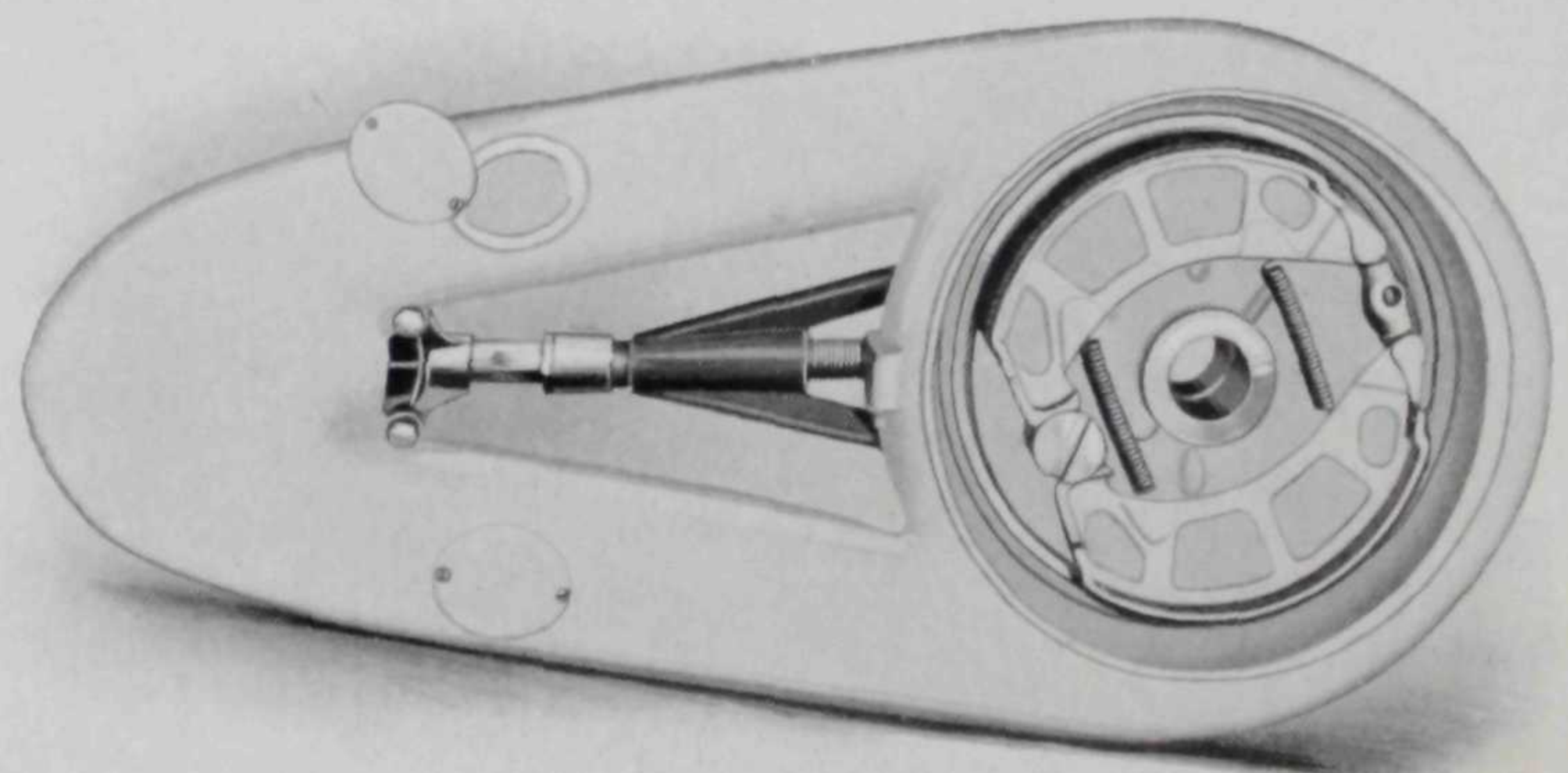
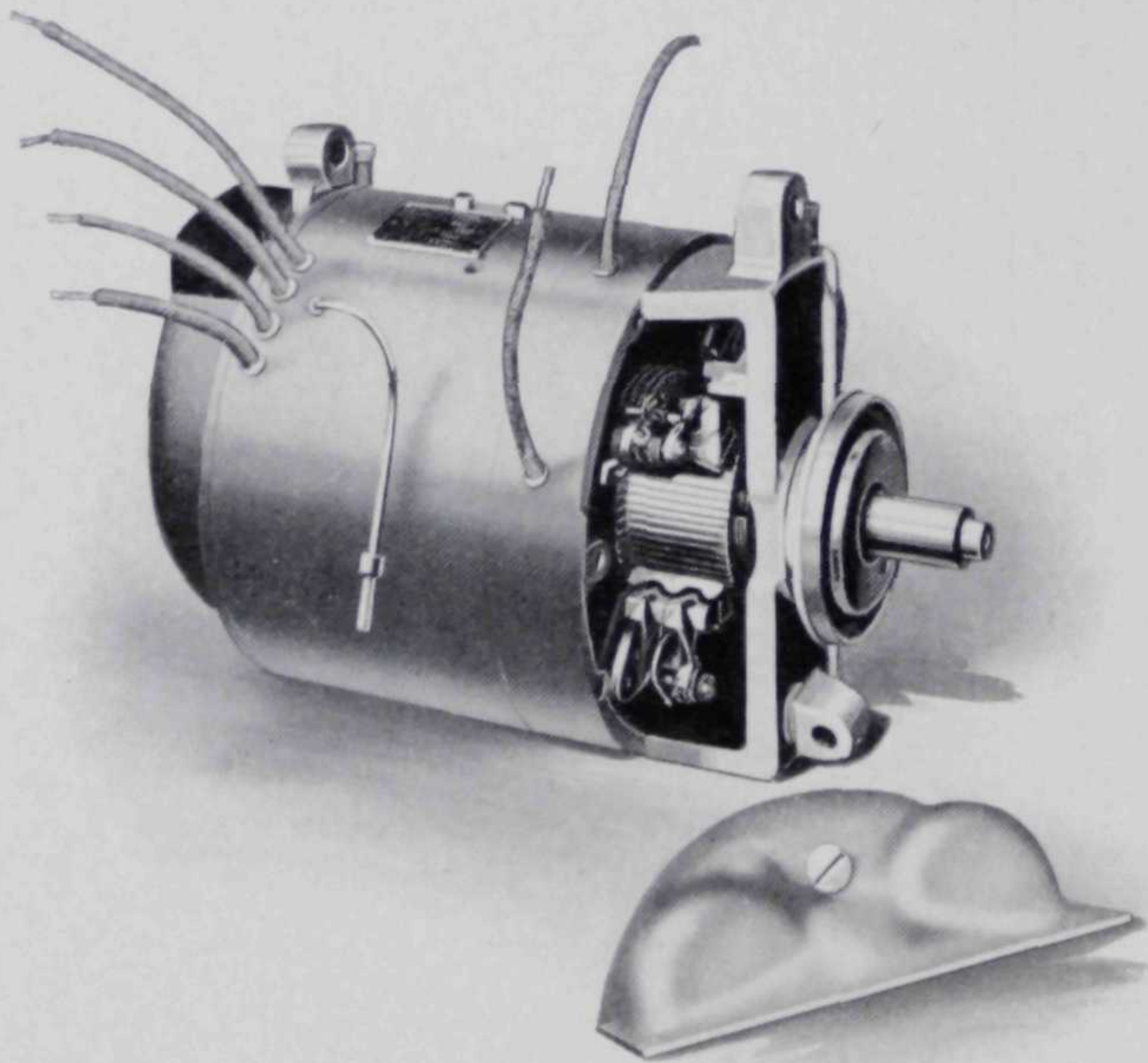
The motor is hung from a three-point suspension and includes as a unit the countershaft, which it drives through a silent chain. Ample provision has been made for oiling all bearings and chain, as well as for adjusting the latter. The motor is of the four-pole type with laminated pole pieces, large commutator surface and is very heavy in copper and iron, which produces a very powerful torque or pulling power at high efficiency. Nothing contributes as much as this to hill-climbing capacity.

The batteries are placed under the hoods, front and rear, and are connected so as to be at all times in series. By means of the flat type controller used, a succession of speed steps is obtained, having continuous torque, so that from the first step to the highest speed there is no interruption to the pull of the motor. As a matter of safety, comfort and battery life, this is of greatest importance.

Just as it is necessary to have means of propelling the car, and as the motor, controller, batteries and auxiliary devices are intended for this purpose, it is important to have means by which the car can be stopped and held; in fact, life may be endangered by the lack of proper brakes.

Our braking system consists, first, of a pair of powerful expanding brakes, enclosed in the rear hubs and operated by a foot pedal. A roller type of expander cam makes them respond to the lightest touch and by a patented adjusting device they can be equalized and wear taken up so as to maintain them always at the point of maximum efficiency and sensitiveness.

To render the stopping of the car still more convenient, the control handle is equipped with a mechanical brake,



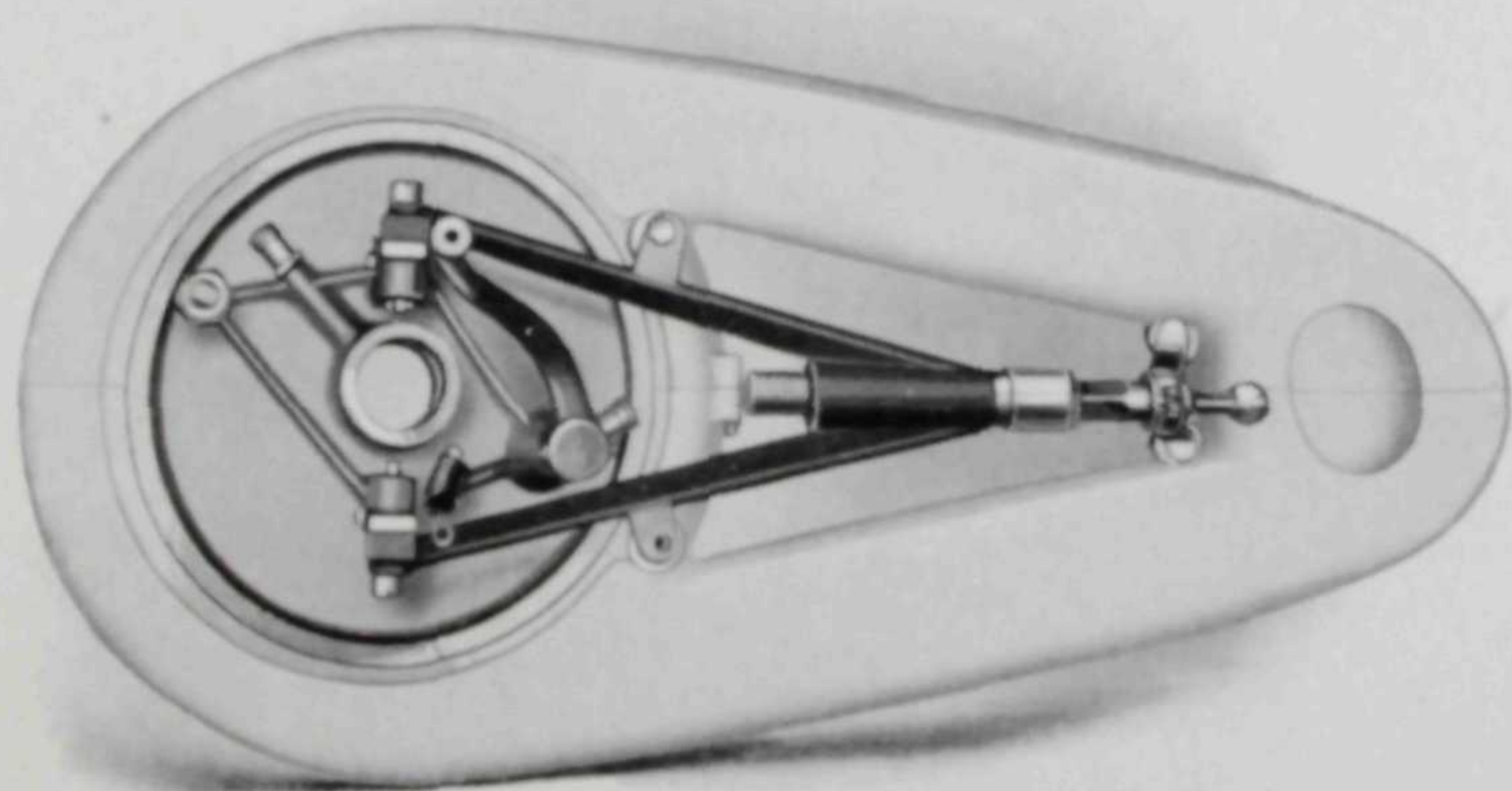
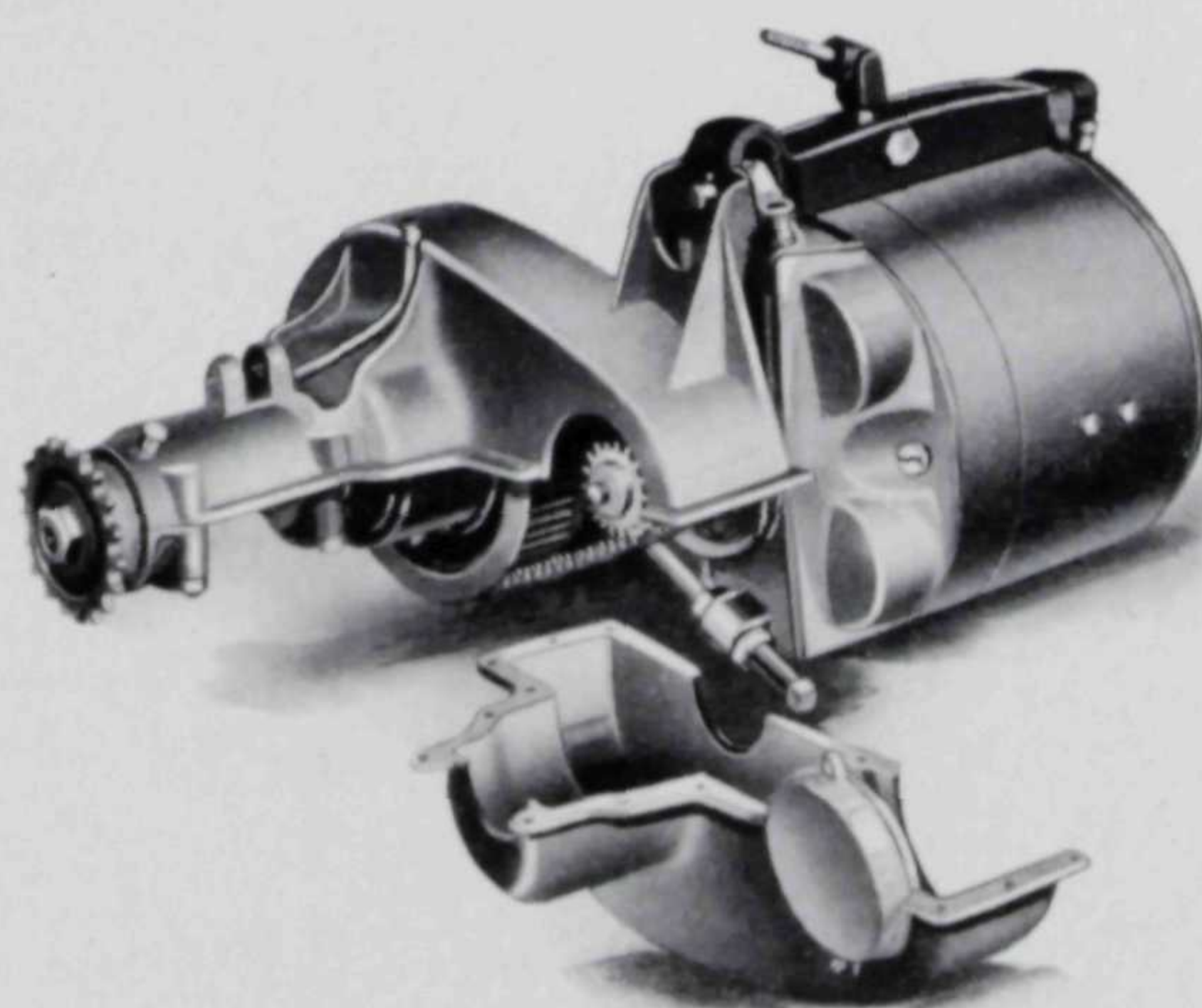


operating on the motor shaft, so that by a slight effort of the hand that controls the speed, this brake can be applied and the car brought to rest. This is perhaps the most natural and easiest executed movement when the driver gets into a place where a quick stop is required, since the same motion which shuts off the power applies the brake; there is no occasion to reach for a pedal or grasp a handle, which in an excited condition generally means a loss of time.

There is also an electric brake which is applied by the same movement of the control handle, but comes into action a little earlier. This automatically converts the motor into a generator and by its action produces torque which quickly reduces the speed of the car. Its construction is such that the action is strongest on the higher speeds where the maximum braking power is required and decreases with the speed. It is positive and dependable, requires no adjustment and wears out nothing. We have furnished both the electric and mechanical brake on our motors year after year and are convinced that they, together with a hub brake, constitute as perfect a braking system as can be produced.

A feature on which we pride ourselves as being, and for years having been, far in advance of all others, is our safety control handle. By the combination in this handle of a Yale lock with a switch for breaking the circuit, it has been arranged that with the key withdrawn from the lock, the circuit is open and the handle is locked and only to be moved into the braking position. With the key inserted and properly turned, the circuit can be closed and then, and only then, can the handle be moved forward to put the car into motion. The trigger operating the switch can be depressed at any point and power shut off instantaneously, but the circuit can again be closed only in the neutral position. Positive safety against thefts and absent-mindedness is thus secured.

Our chain-driven cars have been fitted with all the improvements and refinements which are found in the shaft models. The chassis are dropped in the same manner and the body sizes increased in proportion.





The demand for our enclosed side chain cars during the past year has been most gratifying, which indicates that in certain sections of the country there is a decided preference for these models.

To operate the car:—Insert key in face of handle and give quarter turn.—Pull handle to neutral position and raise trigger or circuit-closing device.—Place right hand on steering bar.—Push forward on the control handle until the desired speed is attained.—To stop the car, pull backward on controller handle until brakes are applied.—To reverse motion of vehicle, controller handle should be placed in neutral position, then depress foot lever located in floor and move the controller handle forward.—The vehicle can be stopped when going in either direction by pulling backward on controller handle until brakes are applied.

The remarkable increase of popularity of the electric car which began a few years ago, has been more pronounced during the past season. It has again and again been remarked that, "the electric car is coming into its own." It is beginning to occupy the position of importance, which due to its economy, safety, beauty and service, we have every reason to believe it will fill.

The electric needs practically no attention—is always ready for service—is absolutely safe; has as much speed as is necessary even where no speed traffic regulations are enforced, and owing to its ease of operation, can be readily driven by anyone without mechanical knowledge. Because of these facts the electric is recommended and is the ideal town car for everyone and every occasion. The advancement made in the last few years by the manufacturers of batteries has made possible a mileage of sufficient radius to care for all transportation needs other than touring.

With the passing of the speed mania and with the growth of the popular feeling that the automobile is not a toy, but one of the most important factors that enter into our everyday life, with the tendency of the buyer to consider more carefully the matter of value received, there can be no question of the ultimate success of the electric car.

We are manufacturing under United States patents dated as follows:

October	11, 1898	April	16, 1907	March	21, 1911
January	5, 1904	November	12, 1907	April	11, 1911
February	2, 1904	February	2, 1909	October	31, 1911
February	16, 1904	December	13, 1910		

Other patents pending.



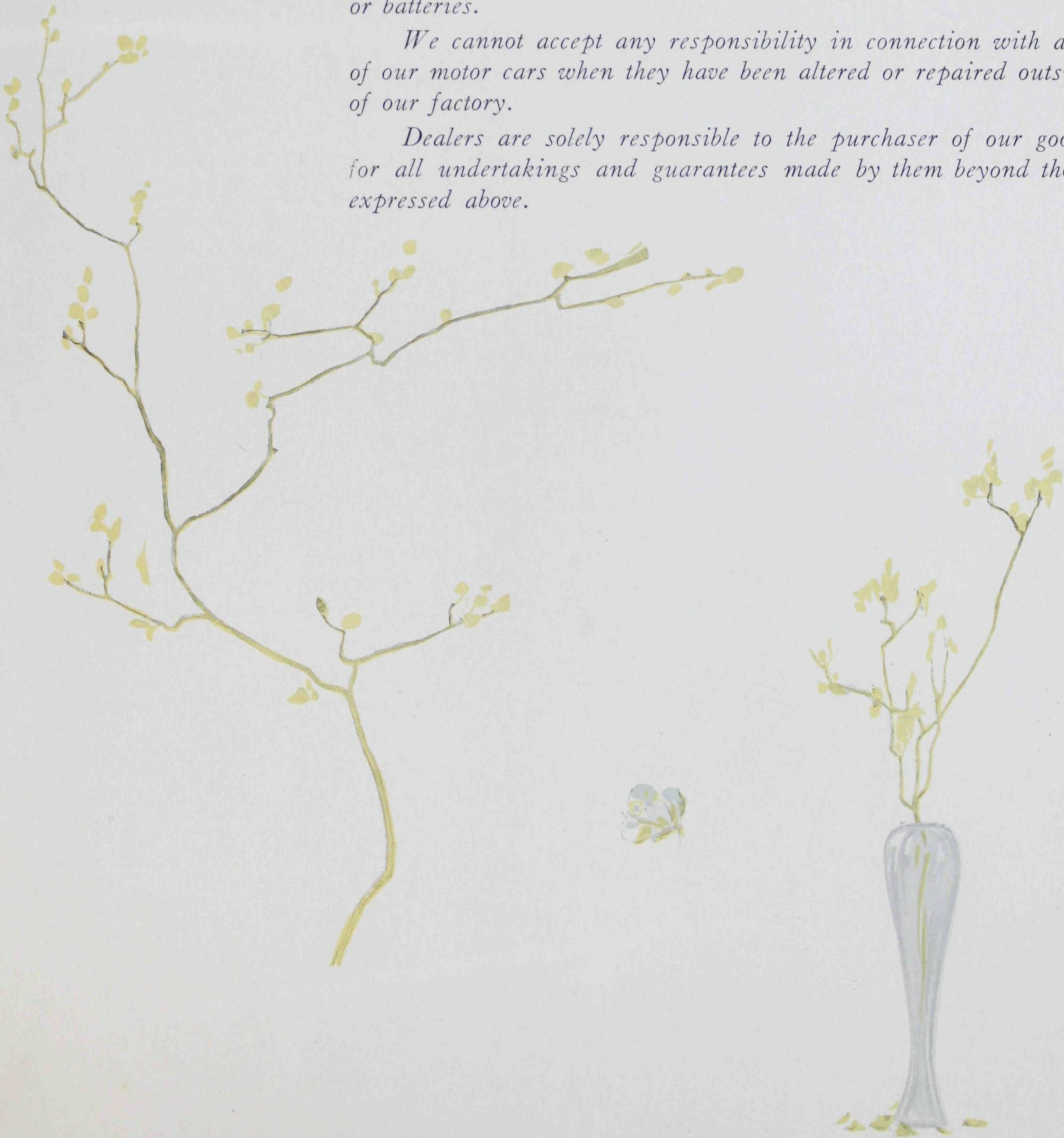
## Guarantee

**W**E guarantee all goods furnished by this Company for one year following the date of their shipment, based upon the date of invoice covering the goods; this guarantee being limited to the replacement in our factory of all parts giving out under normal service in consequence of defect of material or workmanship, without other responsibility on our part of any character. If the circumstances do not permit that the work shall be executed in our factory, then this guarantee is limited to the shipment, without charge, of the parts intended to replace those acknowledged to be defective.

This Company makes no guarantee whatever regarding tires or batteries.

We cannot accept any responsibility in connection with any of our motor cars when they have been altered or repaired outside of our factory.

Dealers are solely responsible to the purchaser of our goods for all undertakings and guarantees made by them beyond those expressed above.







Cleveland Sales Room, Superior Avenue