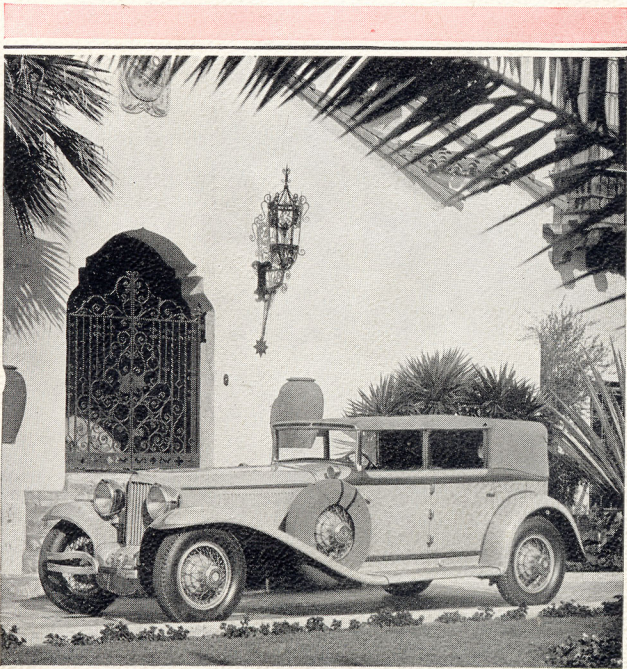


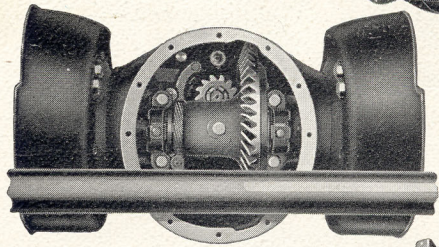
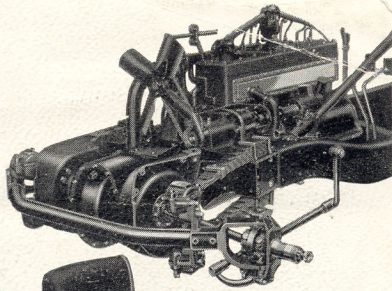


Cord Cabriolet—Enclosed



Cord Phaeton Sedan—Enclosed

Front view, Cord Front Drive chassis showing motor transmission, differential front axle, steering universal joints, front springs and front brake drums.



(Photo at left) Over-sized ring and pinion gear in differential.

Right—Bridge-like construction of Cord chassis frame. Channel stock 7/32". Side rails 7" deep with 3" flanges.

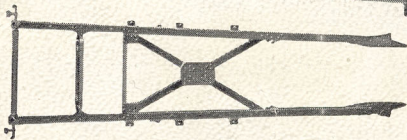
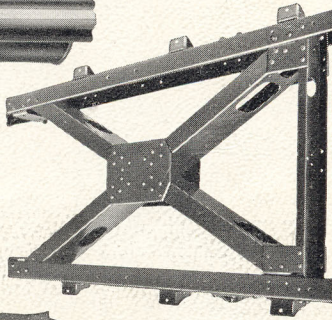
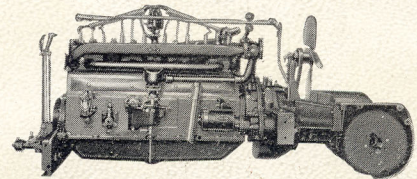
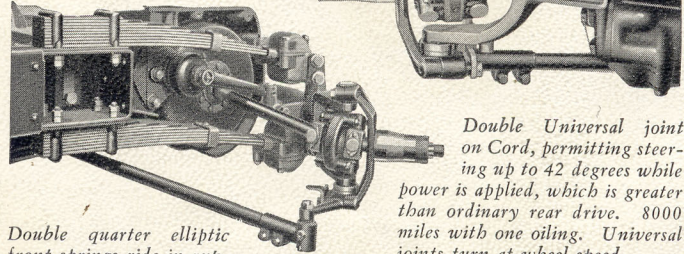


Photo at left shows straight side rails of chassis frame giving freedom of body design.

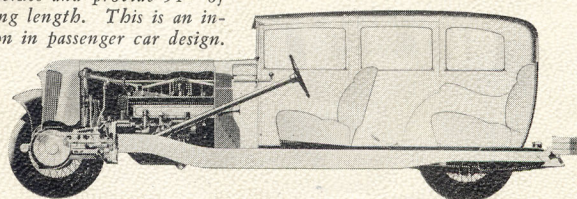


Unit power plant of Cord Front Drive permitting power to be applied near its source. Motor 3 1/4" x 4 1/2". Taxable H.P. 33.8. Actual H.P. 125. No long drive shaft with tendency to vibrate.



Double Universal joint on Cord, permitting steering up to 42 degrees while power is applied, which is greater than ordinary rear drive. 8000 miles with one oiling. Universal joints turn at wheel speed.

Double quarter elliptic front springs ride in rubber shackles and provide 91" of springing length. This is an innovation in passenger car design.

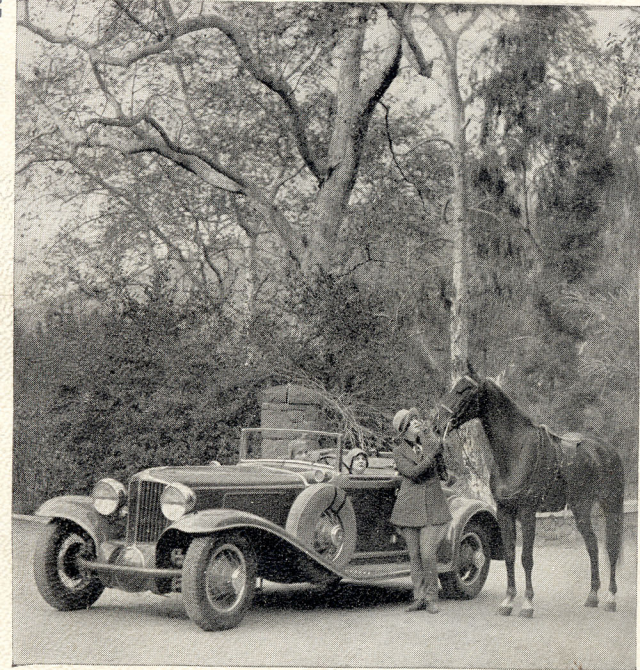
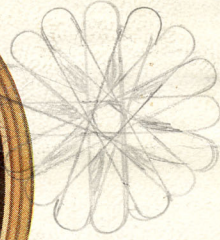
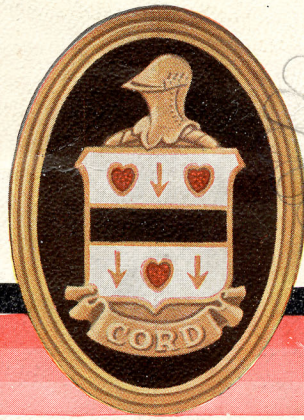


Phantom view of Cord Front Drive showing location of principal units and also straight frame permitting more freedom in body designing for beauty and comfort. Wheelbase 137 1/2".

AUBURN AUTOMOBILE COMPANY, Auburn, Indiana, U.S.A.
Printed in U.S.A.

AUBURN

CORD
FRANK H. WING
199 Commonwealth Avenue
Chestnut Hill, Mass.
Tel. C. N. 4162

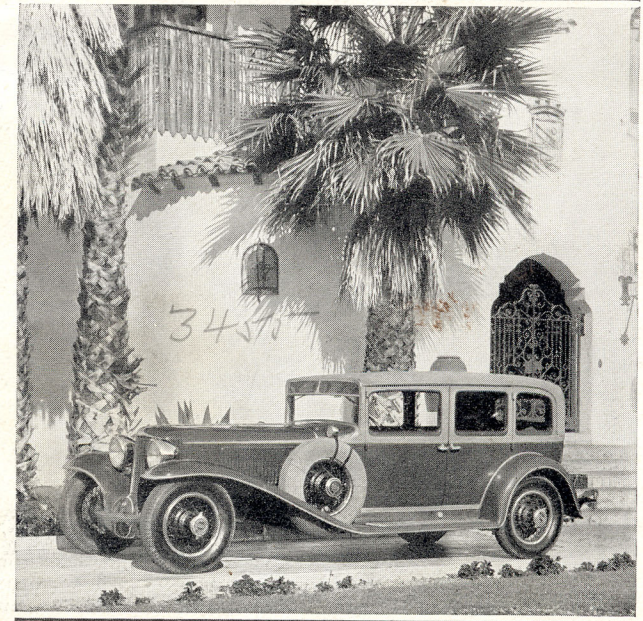


Cord Cabriolet—Open

THE Cord Front Drive car is pulled, not pushed. This difference makes possible better transportation; safer control; easier handling; finer roadability and greater comfort. We offer it as the latest automotive development for those who can afford it. Its many exclusive advantages can better be understood and appreciated by actually driving it.

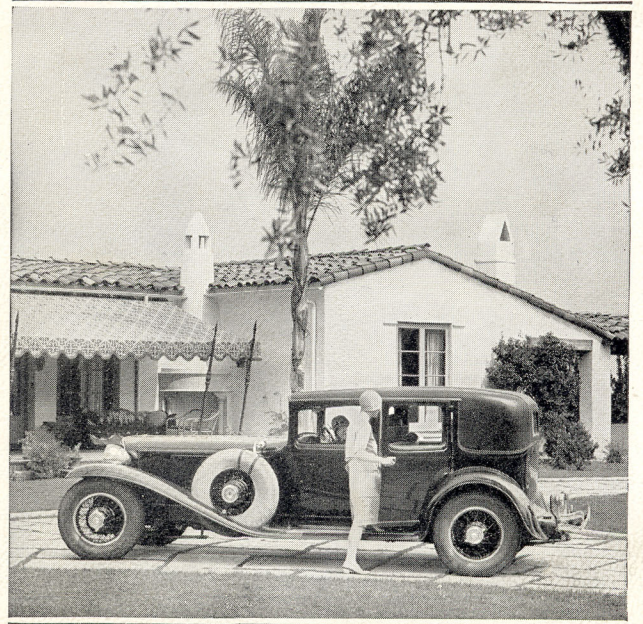
—E. L. CORD.

AMERICA'S FIRST FRONT DRIVE



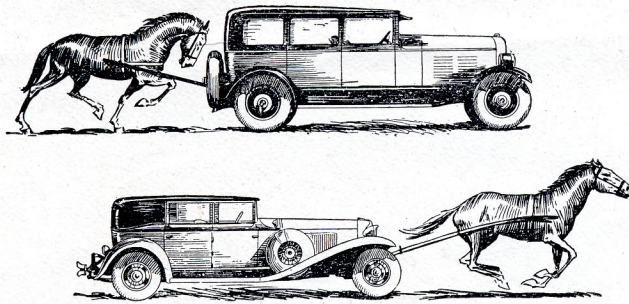
AUBURN

CORD
FRANK H. WING
199 Commonwealth Avenue
Chestnut Hill, Mass.
Tel. C. N. 4162

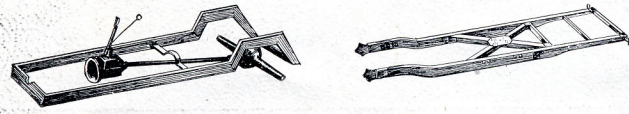


Cord Four Door Brougham

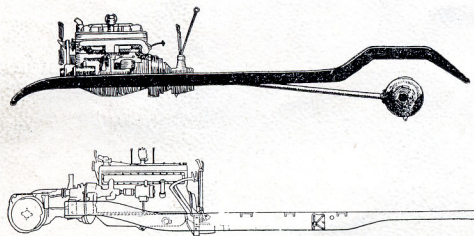
Exclusive Advantages of the CORD Front Drive car that make it Easier and Safer to Drive



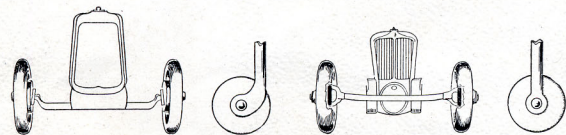
WITH a rear drive car the motor is in front but propelling power is transmitted to the rear axle where it is applied. This means that the horsepower PUSHES your car from the rear. With Cord front drive the horsepower PULLS your automobile because the power is applied to the front wheels.



At left: Rear Drive "Skeleton" frame, impossible to adequately reinforce due to presence of transmission, propeller shaft, rear axle drive, etc. At right: CORD FRONT DRIVE reinforced frame. No moving parts cross-braced to insure proper reinforcement against weave from every possible oblique angle.

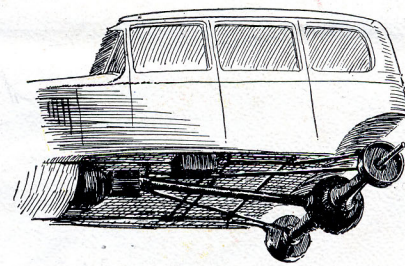


Upper illustration: Frame in rear drive car must have elbow at end to go up and over differential and rear axle. Lower illustration: With Cord Front Drive car frame can be perfectly straight, therefore much stronger.

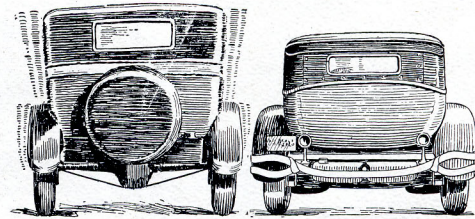


In rear drive cars, king pin is away from center of wheel and at an angle. Compare this with caster in illustration on left. Center of caster is not in center of chair leg. Push chair, and casters turn in different directions. The Cord Front Drive is comparable to casters, whose center would be same as center of chair's legs making front wheels travel in a straight line where pointed.

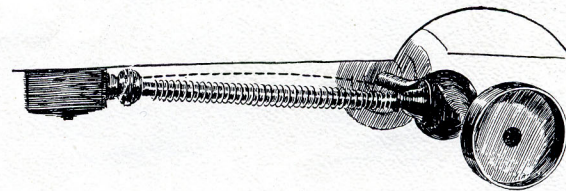
The Cord Front Drive is easier to steer. The brake is not mounted on the wheel, making it possible to put king pin practically perpendicular. Line from center of king pin is practically in direct line with center of wheel.



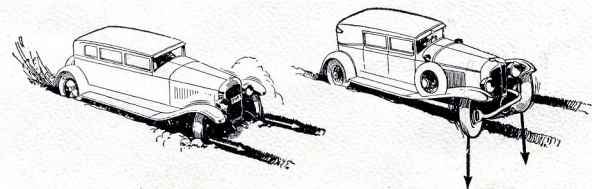
With rear drive car considerable operating mechanism is under passengers; clutch, transmission, battery, propeller shaft, differential and rear axle. With Front Drive, none of this is under passengers. They are not disturbed by noise, rumble or vibration of these operating parts.



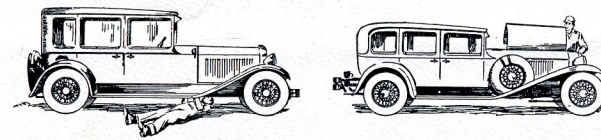
Left picture shows a rear drive car. The center of gravity is higher, because of frame kickup to clear driving axle, causing top heaviness. Right picture shows a front drive car. Due to very light rear axle and straight frame, body is lower, therefore lower center of gravity.



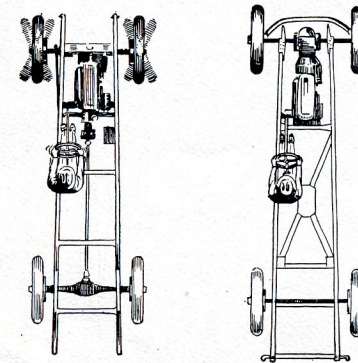
Propeller shaft of rear drive car, revolving at speed of motor. Every bump in the road throws rear axle in the air. The tendency is for this rotating shaft to bend enough to throw it out of balance and set up vibration. With front drive, none of this mechanism is under car, therefore none of the noise of the transmission, propeller shaft or rear axle and none of their vibration.



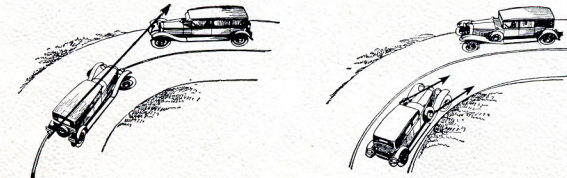
Left: Rear drive car with all four wheels in ruts. Power on rear wheels is aimed and pushing straight ahead, but driver has his front wheels turned to the right, trying to get out. Front wheels are being shoved ahead, in the ruts. This continues until with a lurch, the car leaps out. Right: With the Cord Front Drive car, when driver turns his front wheels, car climbs up and out, because power is applied to front wheels in the direction they are aimed. The power lifts or rolls front wheels out of rut, while rear wheels simply trail behind.



At left: Rear Drive automobiles: No easy accessibility except to motor. Rear axle, differential, drive shafts, propeller shafts, universals, transmission, clutch and gearset all under floor. At right: CORD FRONT DRIVE 100% accessibility: All moving parts, clutch transmission and gearset located ahead of instrument board and UNDER THE HOOD.

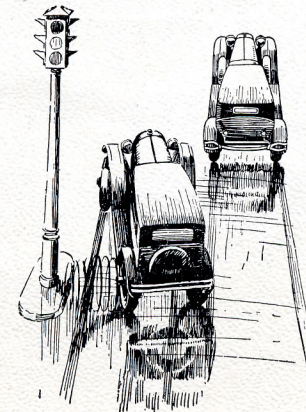


Left picture: A plan view looking down upon driver steering a rear drive car. Due to play and deflection in tie rods, tendency is for wheels to turn this way and that. Front wheels "fight" each other. The result is "shimmying." Right picture: Shimmying eliminated with Front Wheel Drive. Front wheels pull in straight line because they are not being pushed, but are pulling the mass behind them.

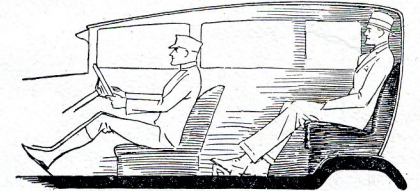


Left: Shows rear drive car going around turn. Power is going the way rear wheels point, the direction of arrow but driver is steering front wheels to the right. The tendency is for car to go the way arrow points, that is to the left, or wrong side of road. Right picture: With Front Drive car it is easy to stay on your side of road. The power is pulling in the direction you steer front wheels. Your Front Drive car goes exactly in direction front wheels go.

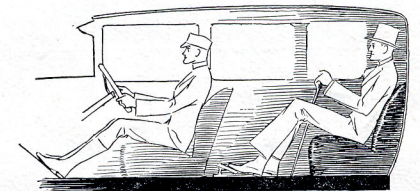
Two cars stop on crown of a slippery road. At the signal "Go", this happens: On rear drive cars, with power applied at rear wheels, the rear wheels spin and slide or skid to side because it is easier for them to go to the side than to push mass of car forward. With Front Drive car, even if wheels do spin, you can steer them and go forward. The power is applied the way wheels point. It is pulling the mass instead of pushing it.



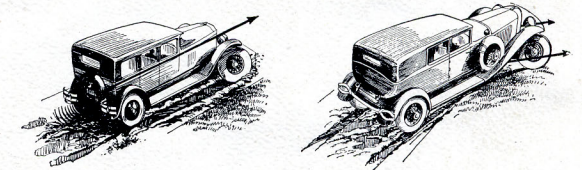
The rear drive as a result of kickup in its frame, compels passengers to ride *on* the car rather than *in* it. In addition, its springs are designed to take driving torque and for propulsion efficiency—NOT passenger comfort.



CORD FRONT DRIVE automobiles (below), have all driving mechanism in front, under the hood; consequently body, frame and springs are engineered for RIDING EASE. With the Cord Front Drive car the frame is perfectly straight. Rear seats are on same level as front seats. Rear passengers have same line of vision as front seat passengers. Top of car comes much lower down and at same time gives rear seat passengers more head room.



Rear drive cars have but ONE purchase for traction in mud or sand or on ice—immediately in front of rear power wheels. CORD FRONT DRIVE power wheels may be swung in an 80 degree turn. Purchase for traction possibility is increased over 1000 per cent.



Left picture: One of the first types of airplanes, the "pusher" type with propeller in rear. All of the first planes were of the "pusher" type. But imperative need in aeronautics for utmost efficiency soon forced aeronautical engineers to adopt the tractor type of plane with propeller in front, (as in the right picture below), to pull the plane through the air.

