The Essex combines at minimum cost the exclusive features of comfort, safety, luxury, performance and beauty that are the attributes of high-priced cars, with the advantage of low first cost, tire economy, light operative cost and minimum depreciation.

The automobile has been developed in two general channels. The first leads in the direction of dignity, silence, refinement and smooth operation. The other emphasizes economy of operation, low initial cost and depreciation. The cars that have been successful along this last line have sacrificed comfort, appearance, longevity or some other of the essential elements that are necessary to the real motor car.

Between these two there is a great field that had not been occupied by any car. It is this field which the Essex fills. Let us see how the engineers analyzed that want and how they have built to meet it.

A car which exclusively meets such requirements must be one in which one can sit comfortably. The backs of the seats must reach the shoulders. The sides must conceal the knees and the cushions must be real seats and not mere ledges.

Such a car must be built at just the right height from the ground, so that one can feel safe when riding in it. No iota of
comfort should be sacrificed to obtain appearance. Beauty should come from the inherent qualities of fitness of line and contour, and of work correctly done.

There must be power for hills and acceleration. The motor should start and run easily on heavy fuel and should possess smooth flexibility of operation. The frame must be so rigid that hard service can never shake the car to pieces. There must be no waste space, no surplus material, no useless weight, nothing for mere show.

Such was the guiding influence in the design of the Essex.

The motor develops in excess of 50 H. P., has four cylinders, is simple in design, light in weight and short in length. The pistons are made very light. The connecting rods very long. The crank shaft very heavy, stiff and scientifically counterbalanced. Operation is smooth and economical. The small dimensions yield extraordinary horsepower because of the unique design of the combustion chamber and gas passages.

The exhaust valves and passages are located at the side of the motor and are cooled by the inrushing cold water. The manifold carrying carburetor is bolted directly to the head and the inward passages are given a downward slope from the carburetor through the valves. Perfect conditions for starting are assured since the raw gasoline flowing from a choked carburetor must prime every cylinder in the most effective way.

The combination of gravity flow of the mixture and the hot manifold insures perfect distribution and complete combustion of fuel. Every drop of gasoline is atomized and burned. The motor has a detachable head, which allows complete machining of the combustion chambers and easy access to the valves and pistons. The spark plugs are fanned by the cool inlet gases. Thus they are kept cool and clean. The valve rocker arms oscillate on roller bearings. Every moving part is enclosed. The crank and transmission cases are of aluminum.

The Essex is so sturdily built that it rides over the roughest roads with the smoothness of a car of much greater weight. Here low first cost obtains, for the first time, in a car with the comfort and safety that has only been obtainable in heavy cars that cost almost twice as much, and a great deal more to maintain and operate.
A REAL CAR must retain its newness. An exceptionally stiff frame with tubular cross members at either end assures the Essex against the rocking stresses of rough roads. Hard service cannot loosen the joints of the body nor twist the radiator. Every moving part is provided with lubrication and adjustment to take care of the inevitable wear.

Even such unusual places as spring brackets and shackles have a positive adjustment for taking up any looseness.

The riding quality of an automobile is in the springs. Weight and wheelbase have little to do with it. Road inequalities are the same, no matter what may be the size or length of the car. The springs of the Essex are as long and as flexible and as carefully designed as are those used under large and heavy cars and they give as good results.

The seats are used more than any other part of a car. The position of
Finger Touring Car

the driver, who is usually the owner as well, is largely fixed by the necessity of commanding the pedals, levers or steering gear. It is, then, of the most importance that the seats, particularly the driver's seat, be ample and well proportioned. With these ideas in mind the body was designed from the standpoint of comfort. Every control is conveniently placed.

The Essex is so designed that it carries no useless weight. This contributes to the exceptional performance of the Essex, and assures long tire life.

The sturdiness with which the chassis is constructed makes depreciation small. The Essex is an inexpensive car to operate. It has the dignity that comes from power and poise. It will continue to operate smoothly and quietly with an acceleration and flexibility that will inspire the pride of ownership. It is in keeping with one's ideas of economy and good taste.
Essex Specifications

**Body**—Five-passenger Touring Car, Roadster and Sedan models in preparation.

**Motor**—Four-cylinder, cast in one block, 3½ in. x 5 in. Intake valves in head. Exhaust valves in side. Length over all, 29 in. Carburetor bolted to intake manifold, which is contained in cylinder head. Entire combustion chamber machined. Flow of gas from carburetor downward through cylinder head, assuring complete and uniform distribution of gases into each cylinder, and perfect combustion. Makes easy starting in cold weather and takes care of low grade fuels.


**Crank Shaft**—Special design, scientifically counter-balanced, giving static and running balance at all speeds. Crank shaft distortion is eliminated.

Three heavy bearings. Front 2½ in. diameter by 2½ in. Center bearing 2½ in. diameter by 2½ in. Rear bearing 2½ in. diameter by 2½ in.

Cams are integral with shaft, and run in four nickel-babbitt bearings.

**Timing Gears**—Helical, of wide face. Teeth cut at angle which assures quiet operation.

**Water Circulation**—Thermosyphon.

**Lubrication**—Constant level, circulating splash. Reservoir bolted to base of crank case. Oil is cooled by air.
Pressure gauge located in cowl apron indicates oil pressure. Flow of oil is controlled by stroke of oil pump connected with throttle.

CARBURETOR—Special Essex design, patented, improved type self-adjusting yet controlled by dash arrangement, with strangler for starting.

STARTING AND LIGHTING—Delco—two separate units.

Light equipment includes Parabolic headlights with dimming attachment. Instrument light and tail light are controlled from dash. Switch is equipped with security lock and keys.

CLUTCH—Multiple disc, contained in oil-tight case in center of flywheel. Two sets of discs, both of steel, the driving discs having cork inserts.

TRANSMISSION—Selective type, three speeds forward and reverse. Direct drive third speed.

STEERING GEAR—Worm and gear type. Full gear and shaft in one piece. Adjustable to take up wear, both worm and gear.

DRIVING SHAFT—Carries two universal joints. All working parts are packed in grease and protected by grease-tight steel covers.

REAR AXLE—Light, strong and of proved satisfactory performance. Housing is of reinforced pressed steel. Driving gears and differential mounted on separate carrier, which is bolted to axle housing and is easily removable without taking axle from under car. Driving gears are of helical type.

BRAKES—Brake bands 14 in. in diameter and 1 3/4 in. wide.

RADIATOR—Cellular type, provided with shutters, controlled from dash. Equipped with motometer. Enables driver to know and control heat of motor at all times. Further contribution to motor efficiency and fuel economy.

WHEELS—12 spokes, front and rear, made of hickory.

Springs—Provide extremely easy riding qualities. Semi-elliptic type both front and rear. Front springs 2 in. wide by 36 in. long. Rear springs same width, 54 in. long.

Spring eyes equipped with phosphor bushings. Adjustable to take up all side wear. Hotchkiss type drive.

FRAME—New design, strengthened at front and rear by tubular cross members. Power plant bolted direct to frame cross member at rear. Frame 6 in. in depth at points of greatest stress. Assures absolute rigidity.

BODY—Compactness of motor provides ample space to carry commodious body without undue lengthening of chassis. Driver’s compartment specially designed for comfort. All operative levers within easy reach.

Top—Made of rainproof material, equipped with quick adjustable curtains.

HORN—Electric motor driven, located under hood.

WINDSHIELD—Integrally mounted on body with permanent standards.

VENTILATOR—In top of cowl, controlled from dash, provides ventilation in front compartment.