

**A Great Car With a Great Motor**

*"No hill too steep—No sand too deep"*

THIS five-passenger touring car is without exaggeration the most beautiful car ever built by the Jackson Company. It is complete. There is generous room for each one of the five passengers. The tonneau compartment is exceptionally ample. The soft upholstery is in real leather. Painting and trimming is done in the Jackson shops and there is an air of finality to every detail that makes both dealer and owner proud of the car.


Its Eight cylinder "V" type, overhead valve motor is matchless in its simplicity, its flexibility, power and accessibility. It is easy starting in any weather. Its smoothness is simply extraordinary. Come and see. Find out for yourself.

Five-Passenger Touring Car, \$1295. Four-Passenger Cruiser, including five wire wheels \$1395. Wood wheels \$1100 less. Two-Passenger Roadster, \$1295. Six-Passenger Sedan (Demountable Top) including regular top, \$1505. All prices f. o. b. factory.

**AT THE AUTO SHOW**

**P. H. KEOCH**  
District Sales Manager,  
15 S. THIRD STREET HARRISBURG, PA.  
Bell, 572-W

Jackson Automobile Company, Jackson, Mich.



**BEST ENGINE IS LIGHT AND SPEEDY**

Expert of Oakland Company Says Lightweight High Speed Motor Is the Best

By A. C. HAMILTON, Chief Engineer of the Oakland Motor Car Company

From every angle the light high speed motor is the best engine for automobiles. Not only does it give the motorist economy, flexibility and a smoothness that cannot be equalled by the heavy, slow speed type, but it is the most logical from the point of technique in its construction.

Coming after the steam engine internal combustion motors naturally followed the best steam engine design. At the outset engineers had nothing from which to work except the steam engine. The best principles of steam engine design called for a large bore and a short stroke in an engine whose piston speed never exceeded a thousand feet a minute.

It was considered dangerous to attempt a higher speed per minute with a steam engine, and the first internal combustion engines were designed with a large bore for the cylinder and a short stroke. Experiment and test showed the weak points of such construction.

The larger the heated surface of the combustion chamber, the more waste of heat and consequent loss of efficiency, engineers found to be one drawback. Then, too, the spread was held down by the inertia of the reciprocating parts—energy lost when the heavy piston was stopped at the end of the upward or downward stroke.

The big heat surface of the large bore, short stroke motor also prevented the use of high compression because it produced pre-ignition, commonly called "spark knock," was extremely hard on the bearings and disagreeable to the motorist.

To reduce the inertia of the reciprocating parts and the charging and scavenging of the cylinders.

With a view to reducing the heat surface of the cylinder and eliminating all the waste heat possible the bore of the cylinder was reduced and the stroke lengthened. This not only adds power by reducing the heat losses, but it lightens the reciprocating parts, thus reducing the inertia.

These points of construction gave this type of motor a distinct advantage over other types. It reduced the heated surface so that "spark-knocks" were eliminated. It permitted the installation of the same sized power unit in a shorter space, getting away from the long heavy motor and enabling designers to have more latitude in the exterior lines of a motorcar.

Having established the superiority of the long stroke small bore motor, engineers discovered that the overhead valve gave the best results. This is due to the fact that there are no pockets in the combustion chamber in this method of construction as opposed to the L-head or T-head motors. While harder to build, this type is worth while, and its success as a power producer is well recognized by makers of aviation motors and automobile racing cars.

In the construction of Oakland "Sensible Six," both the overhead valve and small bore long stroke motor have been worked out to a point of maximum efficiency. Oakland Six motor represents the very latest in approved practice of engine construction.

**AUTO DEALERS ON FINE BASIS**

Expert Tells of New Conditions That Have Helped the Dealer

By Vice-President L. E. Willson, Briscoe Motor Corporation.

The average automobile dealer today is making a good profit on his investment. In the early days, possibly because the business was new and there were no established precedents or plans to guide them, many dealers had difficulty in breaking even or lost out on the venture.

Your dealer to-day shows keen judgment in the selection of the different makes of cars. He has learned from experience—dear experience—to gauge the wishes and requirements of the motor buying public. The ever widening field or the more diversified use of the motorcar has been a great factor in aiding the dealer to make money.

Both dealers and manufacturers are now co-operating to make the automobile business a twelve-month business, and regardless of the fact that for years two breaks have occurred during the automobile year—one the winter season—it has proved itself to be the greatest industry of the ages.

Most manufacturers—and wisely too—are eliminating the break in the selling season by making changes in their cars as a gradual development rather than an abrupt and sudden change from one design to another.

The Briscoe Motor Corporation, like numerous other makers, has been working under this policy for some time, and it is a welcome protection to both dealers and owners, who heretofore never knew at what moment they might suffer a loss in value through a change in the model of the car they were selling or driving.

**Aluminum Pistons Continue in Use in Chalmers Car**

With prices of raw materials jumping skyward, automobile manufacturers are constantly confronted with the temptation to lower the quality of their product. That they conscientiously refrain from doing so is a tribute to their desire to manufacture quality first cars.

"Probably no single item entering into car manufacture has increased in cost so much as aluminum," says C. C. Hinkley, chief engineer of the Chalmers Motor Company. "But we continue to use aluminum alloy pistons because we know that type to be superior for installation in our high-speed motors."

Aluminum pistons cost approximately \$6; the same number of cast iron pistons cost about \$1, and increased expenditure holds good all the way through our car. Our valves are of tungsten steel, so hard that they will stand the highest temperature; the usual valve is of nickel alloy, which is much cheaper. We use pressed cotton gears, which last four times as long as the usual gear.

"Our constant endeavor is to build a strong, light car with a powerful motor. The aluminum piston used in our 'Sensible Six' weighs only twelve ounces. Compare it with the usual cast iron piston of two and a half or three pounds in weight and you can appreciate the saving in weight. The result is less pressure on the connecting rod and bearings.

"Weight and vibration are the two greatest contributors to expense in operating a motorcar. By eliminating each factor to the best of our ability we have secured a car that ranks as one of the most economical on the market. And economy seems to be the thing desired by the public."

**Dodge Sedan, Convertible, Achieves Popularity**

Keeping faith with the public brings quick reward.

Evidence of this truth is to be found in the results following the recent publication of the first advertisements relating to the Dodge Brothers convertible sedan, exhibited at the Automobile Show. The advertisements stated merely that "the sedan is a car such as you would expect of Dodge Brothers," and that it was designed and built complete in Dodge Brothers' works.

Immediately, and in most cases without further idea of the car's appearance, people began placing orders. The fact that Dodge Brothers built it seemed a sufficient assurance of refinement and quality. The result is a demand with which dealers may not be able to keep pace unless there is a big change for the better in shipping and manufacturing conditions generally.

The Dodge Brothers sedan, like the Dodge Brothers coupe, is truly a car of distinctive appearance. Designed to embody the very latest and best in American and foreign coach work, it immediately conveys a lasting impression of comfort, quality and refinement.

The greatest lines are conservative as well as graceful and dignified. The absence of extreme lines, the body is one that will suffer little from sudden shifts of fad or fashion. The

**Hudson Super-Six Car Is Economical to Run**

P. S. Blatchley, oil geologist, of Champaign, Ill., says the Hudson Super-Six is an economical car to own, and submits figures to prove it. After driving the Hudson car 5,469 miles in three months, his running expense was \$127.60.

Three hundred and ninety-five gallons of gasoline were used to cover this mileage, a running average of 13.8 miles per gallon. Nineteen gallons of oil were used or one gallon for every 237 miles. One 40-mile trip and two 700-mile trips were taken. Sixty per cent. of the remaining 3,600 miles consisted of city driving. Mr. Blatchley says the engine of his Super-Six was never touched for repair or adjustment, and that he is delighted with this record.

The Hudson display at the automobile show under the direction of L. H. Hagerling, local Hudson distributor, is one of the most attractive there. "I took four prominent residents of Albany on a motor trip to Detroit to attend the world's salesmanship congress," says E. V. Stratton, Hudson distributor at Albany, N. Y. "We left Albany at 5.35 in the morning and reached Philadelphia at 6.15 p. m. Half the trip was made through pouring rain. The route we took showed 258 miles. The round trip mileage was 519 miles; and for the entire trip the average mileage per gallon was 18.8 miles. On the return trip we left Philadelphia at 9 a. m. and made an hour and a half stop in Trenton, reaching Albany at 8 p. m. We were not driving at what would ordinarily be considered an economical speed.

"Many Super-Six owners in Albany and other New York towns are getting 16 to 20 miles on a gallon of gasoline."

**U. S. Army Engineers Endorse Jeffery Trucks**

To pass muster by United States army engineers, a motortruck must accept the time honored challenge of the army mule and demonstrate its ability to "go anywhere a four-wheel team can go." This challenge has been met successfully by the Jeffery Quad again and again not only in severe tests but in actual workaday service down in Mexico.

The technical qualities that a motor vehicle must meet to be selected for service in this department of the army are: Positive nonslipping drive on all four wheels, high ground clearance both under axle and center of truck (the reason is obvious to any one who has seen a motortruck cross a desert or an unbroken field) ability to revolve on all four wheels under almost any road conditions.

In addition to possessing all the above features the Jeffery Quad is rendered all the more desirable by having the ultimate in tractive ability—namely its locking differentials and special tire chains.

The Jeffery line is handled exclusively in Harrisburg territory by the Benz-Landis Auto Company of Logan street.

**Display of Used Cars**

During the Auto Show we will exhibit at our Showroom Used Cars of Standard Makes, rebuilt or overhauled, some repainted, all in fine running condition. They will be sold at

**Winter Prices**

A small deposit will hold your car till Spring.

**Music From 2 to 5**

The Overland-Harrisburg Co.  
212 North Second Street  
Closed Evenings this week.

**CONSTRUCTION IS FRANKLIN'S POINT**

E. W. Shank, Local Distributor, Is Exhibiting 1917 Models at Show

The Franklin for 1917 is built in one type of chassis, on which the eight types of bodies fit interchangeably. These are the touring car, runabout, four-passenger, cabriolet, sedan, brougham, limousine and town car.

Prices on these various models range from \$1,800 up to \$3,000. A noticeable feature of Franklin body construction is the make-up of the body sill and the method of attachment to the chassis frame. The body proper is without a floor—the chassis platform serving this purpose—and is suspended at four points on the chassis frame. This construction serves two purposes. It furnishes the lowest possible floor line and, while allowing a firm body sill to which door casings and other framing may be anchored, does not interfere with the resiliency of the wood chassis frame.

Upholstery is hand-buffed, straight grain leather, semibrilliant finish. The standard color is Brewster green. In the case of the sedan model, provision is made for suit case trunks.

Instead of the cylinders being cooled by water which in turn must be cooled by air, the Franklin applies air directly to the cylinders without water as an intervening medium. Franklin cooling eliminates a radiator, all hose connections, pipes, pumps, water jackets, fan and belt—177 parts in all.

The Franklin is represented in Harrisburg territory by E. W. Shank and is among the most attractive exhibits of this year's automobile show.

**GEORGE H. SOURBIER FUNERAL DIRECTOR**  
1310 North Third Street  
Bell Phone. Auto Service.

**BRISCOE \$685**  
*The Car With The Half-Million-Dollar Motor Fully Equipped*



**YOU WILL LIKE THE NEW BRISCOE**

**Progress** THE new Briscoe at \$685 we believe is the best looking, the sweetest-running automobile ever built at the price. Success has made it. Increased production has lowered costs, provided more refinements.

**Character** TOURING car has surprising roominess—try it! Four-passenger roadster is the only car built with a full back to the front seat—a novelty—see it! Briscoe-built in Briscoe factories insures quality in every detail.

**Message** YOU will miss the real meaning the show holds for you if you fail to see the beautiful, handsomely finished and completely equipped 1917 Briscoe models.

Five Passenger Touring Car \$685 Coachette \$810  
Four Passenger Roadster \$685 Delivery Car (Canopy Top Body) \$700

**E. T. MEHRING, Distributor**  
1717 N. FOURTH ST., HARRISBURG, PA.  
Bell 505-J. Some Open Territory.

**Compare! Now—compare!**  
Today the motor wares of the world are spread in centered and splendid array for your review and verdict. A week of opportunity! A "world's fair" in motor-dom! And a chance to see the new Twin-six under the most auspicious circumstances. If the superiority of the Packard has never been apparent to you, comparison must make it so now. An interesting and an easy task! At the automobile show—you owe it to yourself to compare.



**A BETTER NAME**  
What does Bluffem call his new country place?  
Althea-among-the-Maples.  
Huh! Last time I saw it I thought of naming it Dog-fennel-among-the-Buck-plaintains.—Farm Life.