

CHARACTER FACTOR IN AUTO BUILDING

Great Plant Facilities Needed to Accomplish Correct Result, Erskine Says

As in everything else, character does not exist in an automobile. Being a fact, character is discernible wherever it is determined by correct design, high-grade materials and workmanship and superior performance. Automobile makers generally strive to produce cars of character, as obviously permanent business success depends upon one's ability to do this, and yet one possessed of the best intentions may fail in such a task. Four causes too numerous to mention, might not be converted into real business means of conversion are available in hand, and in the automobile business these means are possessed by comparatively few manufacturers with large, experienced organizations, great plants and unlimited financial resources.

To begin with men are the most important element in every undertaking. Collectively, we call them the organization. By the use of tools, machinery and equipment, commonly called "plant facilities," they convert designs to realities or products of the factory. But even a strong, sensible organization cannot produce cars of character, without great plant facilities, including electrical and physical laboratories, experimental departments, foundries, forgings, heat treating and sandblasting shops, stamping plants, machine shops, body, upholstery, painting and finishing shops, etc. These plant facilities usually require from 2,000,000 to 5,000,000 square feet of floor space, cost from \$12,000,000 to \$20,000,000 and employ from 10,000 to 15,000 men.

Manufacturers with such plants and organizations fully protect themselves and carry out their own ideas, designs, manufacturing operations and assemblies, including the purchase of raw materials, without depending upon outside sources of supply.

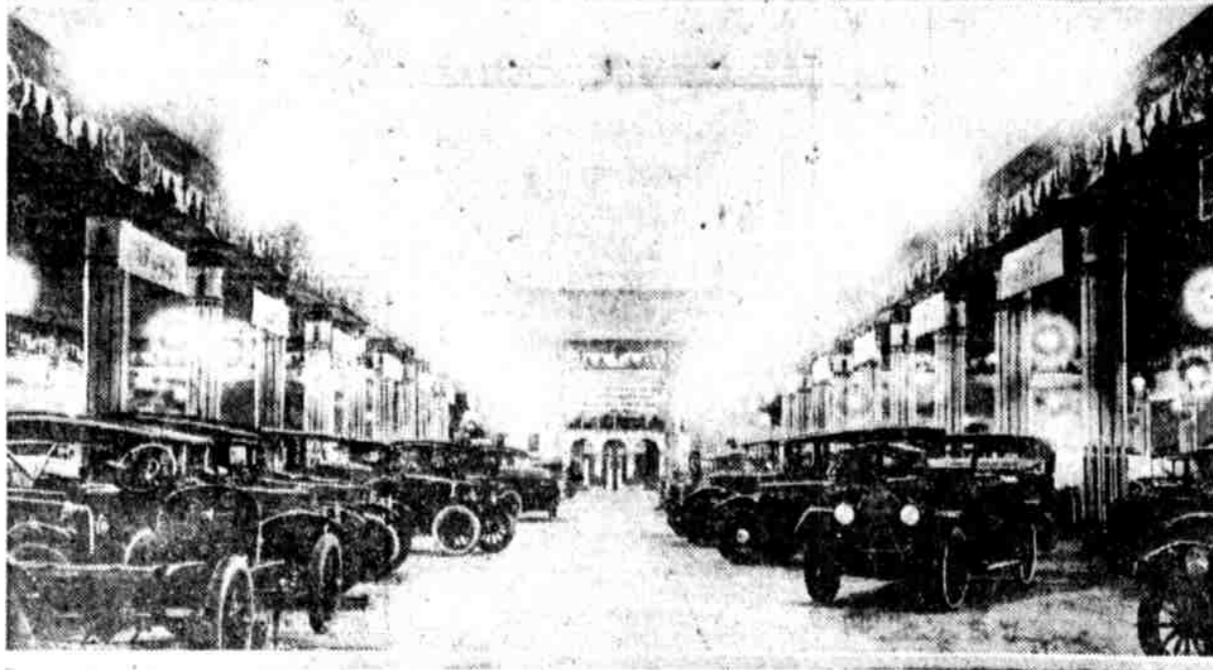
This centralized control of design and production of parts and assemblies in the manufacturing plant, insures accurate functioning and a harmonious product which obviously is necessary in cars of character and which cannot be economically obtained in any other way. As the public will not buy even a car of character in large quantities unless the price is right, it is obvious that these large organizations and plant facilities have developed an essential requirement to quantity manufacture.

Correct design is the first requisite in an automobile of character, not only of the chassis but of the body, fenders, windshield, fenders, lamps, etc. Style plays a big part in design, as many people buy cars solely on the basis of appearance and put their trust in the manufacturer for everything else. While often times this confidence is not misplaced, many times it is, and the tractor is reckless and indefensible. It is more characteristic of some than of men, who naturally know more about machinery and materials. People without a fair knowledge of machinery should never purchase an automobile without advice from someone who possesses such knowledge.

Assuming a car is correctly designed, it may easily be spoiled in production if cheap or unskilled materials are used, or workmanship is indifferent. It is the business of the metallurgist, chemist, engineer and production experts to design upon the proper quality of steel, metal and materials generally, so that the sales executives in selection of body materials, finishes and styles.

Continuous tests of materials are being run in the laboratories and experimental department to their own satisfaction of material selected. Studies of foreign and domestic cars and their designs, including the purchase, disassembly and diagnosis of such cars, are quite customary to determine materials and designs used by others. In production proper and exact maintenance is as important as design is in the automobile, and therefore every machine and a number of inspections are required.

CORRIDOR AT PHILADELPHIA AUTO SHOW



New Contributions

The Lorraine, produced by the Lafayette Automobile Co., Philadelphia, and the creation of the White, eminent motorist design of the most recent important contribution to the motorist industry was introduced in the 1921 program of the Philadelphia Auto Show. The Lorraine is a four-cylinder, four-door sedan, and the White is a four-cylinder, four-door sedan.

Designed for Comfort

The new models are equipped with a new type of seat, designed for comfort and utility. The seats are upholstered in a soft, resilient material, and are supported by a spring mechanism that allows them to conform to the shape of the occupant's body. The seats are also equipped with adjustable headrests and footrests, providing a high degree of comfort and relaxation.

Four-Cylinder Models

A new four-cylinder model has been added to the standard line of passenger cars, and with the existing six and eight-cylinder models, the purchaser is offered the option of every combination of cylinder numbers, up to a twelve-cylinder. The new Model 48-A has a wheelbase of 115 inches, which is three inches longer than that of the present six-cylinder car.

Offer Six Models

The Patterson is furnished regularly as a five-passenger and seven-passenger touring car and a five and seven-passenger sedan, three-passenger coupe and two-passenger roadster.

Three-Passenger Roadster

In the Scripps Booth display are seen the sedan and five-passenger touring types, although it is also produced as a three-passenger roadster, with adjustable seat and a four-passenger coupe.

Attractive Sedanette

During the last year the Standard Eight has added a new body type in a very attractive sedanette, seating four passengers. It is distinctive, smart and unconventional, making a charming addition to this line.

Unique New Coupe

Premier improvements this year include mainly the contribution of an exceptionally roomy and completely designed coupe, an ideal car for winter comfort.

NEW CAR SHOWN HERE FIRST TIME

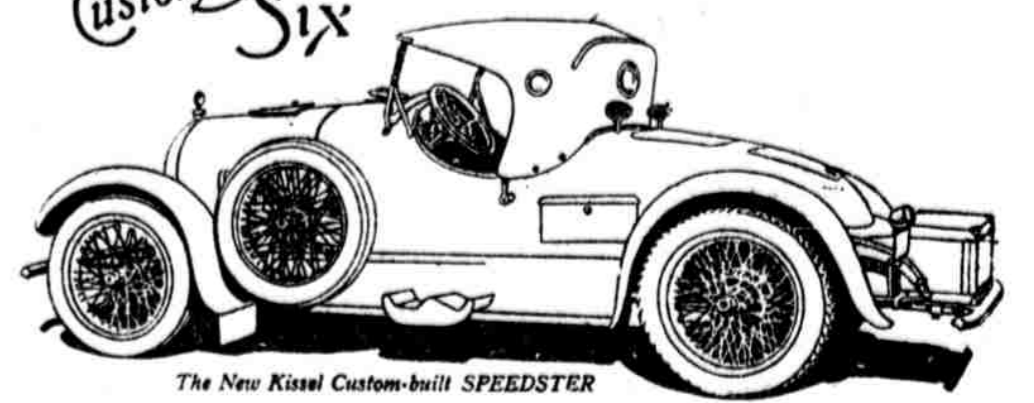
Complete Handley-Knight Exhibit Brought to Philadelphia From New York

The new seven-passenger Handley-Knight line, the complete exhibit from the Hotel Commodore, which caused such favorable talk at the New York Automobile Show last week, is exhibited for the first time in Philadelphia this week by Paul Irving Harper, through the courtesy of the Overland Harper Co., at the temporary location, the Overland Harper Co.'s salesroom, 1020 Arch street.

Especially built for the fine car owner who drives from choice the Handley-Knight car was designed to conform to a standard of perfection in everything that makes for satisfaction. As its name indicates, the motor is the Knight sleeve-valve, the frame re-enforced beyond all previous standards. The soft-springing springs of special steel not only give comfort but cushion, and give longer life to the mechanism. The axles were especially designed for absolute safety and dependability. The Handley-Knight combines performance with appearance to a degree that is unusual.

Just where the permanent location of the new Handley-Knight will be has not yet been decided upon by Mr. Harper.

KISSEL Custom-Built Six



The New Kessel Custom-built SPEEDSTER

Two New Examples of Kessel Individuality at Commercial Museum Building

First public view of new Speedster and new Coach-Sedan—designed and built by Kessel

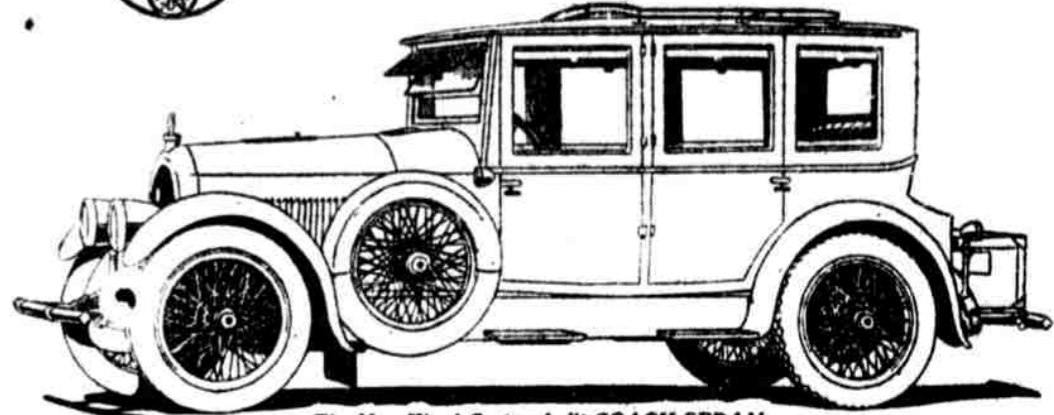
The SPEEDSTER—Finished in Kessel Chrome Yellow—equipped with new Kessel individual steps and sport fenders—Kessel-designed semi-racing body with unusually comfortable driving and riding positions—two auxiliary seats.

The COACH-SEDAN—A new type of enclosed coach body finished in Kessel Black—equipped with permanent Kessel inlaid, four-door, coach seats with high form-fitting backs, accommodating three people each—individual steps and sport fenders.

Both mounted on the Kessel Custom-built chassis—powered by the Kessel-built six motor.



GRIEB & THOMAS
306 North Broad Street
Auto Show, Space 38



The New Kessel Custom-built COACH-SEDAN

Allen

Hits the Bull's Eye of Public Demand

1921 Model
opens at
Philadelphia Show
New Price
\$1395

Booth 54 at Commercial Museum
SALESROOM, 820 N. BROAD ST.
Phone Poplar 4166

FIAT

Turin, Italy

"EUROPE'S LEADING CAR"

We have just received the latest Fiat Post War models from Turin, Italy. They are the small models, generally known as the "Baby Fiat"—really remarkable cars, yielding 26 to 30 miles on a gallon. The cylinder box is smaller than on any American-made car.

With a 105" wheel base, it has a turning radius that permits the easiest handling in crowded downtown traffic. Yet the three body styles, Roadster, Touring and Sedan, are all exceptionally roomy and comfortable.

The Sedan, especially, is a marvel of compactness and completeness—seating five. The cars and bodies are built and finished in Italy. The price is easily within the scope of the average buyer.

POTTER-DIESINGER MOTOR CO.
(Formerly Fiat Motor Co. of Pa.)
2207 Chestnut Street
Bell Telephone—Spruce 2140

Daniels-8

The Distinguished Car

Quickest Way to Get to Automobile Show

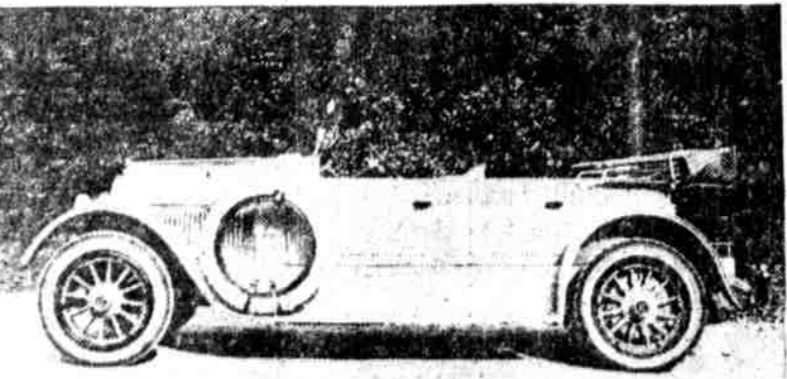
The quickest way to get to the Philadelphia Automobile Show, 306 North Broad Street, is to take the car to the show. No matter from what point you start, it is to go by car.

There are other ways, but getting to the show by car is the most direct and convenient. The car is the most comfortable and the most reliable mode of transportation. It allows you to travel at your own pace and to avoid the crowds and delays of public transportation.

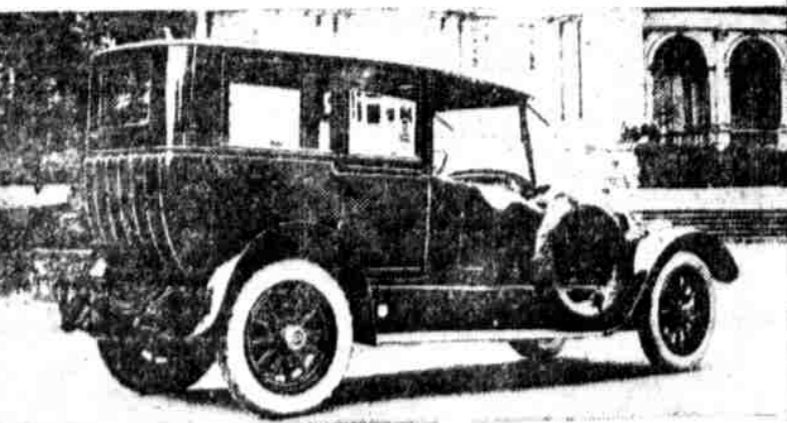
Of course, you will need a car to get to the show. The Daniels Eight is the perfect car for this purpose. It is a custom-built car that is designed for comfort and convenience. It has a spacious interior and a powerful engine that allows it to travel quickly and easily.



Daniels Eight Speedster, Model D.



Daniels Four-passenger Touring Car, Model C.



Daniels Limousine.

The Daniels Eight is not for those willing to submerge personality in the monotonous sameness of ordinary cars. Every Daniels reflects the individuality and good taste of its owner.

The Daniels is custom-built at the dictation of the purchaser to satisfy every personal preference in appointments, upholstery and coach work. The result is genuine distinction and luxury.

These individual refinements, added to the mechanical pre-eminence of the Daniels, produce a car that is truly incomparable.

Exhibit No. 30 at the Automobile Show

MATHIS MOTOR CO., 674 N. Broad Street

Have you observed how advanced is the National Sixter in both distinctive style and mechanical construction? On display at the motor show.

Samuel Earles Motor Co.

National
SIXTER

Visit first the **MARMON**

miniatures
Automobile Show
Space No. 52