

WEATHER AFFECTS STORAGE BATTERIES

Much Less Efficiency Shown in Cold Season Than Under Warm Conditions

DIFFICULT TO START

"Automobile storage batteries show less efficiency in cold weather than in warm weather," asserts R. A. Haro, sales manager of the Auto Equipment and Service Co.

"The winter months, with their increased hours of darkness, take an extra toll in electrical energy from every storage battery. Even if a battery has stood up well during the summer season, the surplus energy normally stored in winter may cause it to fail by becoming prematurely discharged.

"The engine is always more difficult to start in cold weather because the gasoline will not vaporize quickly and due to stiffness of the oil in the bearings and around the pistons. This engine resistance demands a further increase in the output of the generator and consequently a more urgent call upon the battery to keep up the electrical supply.

"These conditions should be anticipated by the motorist and preparations for the winter months made accordingly. If the battery, after a successful summer, does not indicate a normal test its faults should be looked after at once before it is subjected to the crucial test of winter.

"Of course, nowadays very few cars are put away for the winter. When this is necessary, however, the battery should be dry stored to eliminate deterioration. This is done by disconnecting the battery entirely, replacing all worn parts and reassembling without electrolyte. The battery is then hermetically sealed to prevent air attacking the plates. It is only necessary with a battery so prepared to fill with new electrolyte in the spring and give a freshening charge, exactly as new batteries are placed in service. The result is a dependable battery rather than an unknown quantity."

First Show Here Rather Circusesque

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then selling cars came in and then a number of trucks which were brought to the armory on trucks and did not run then and have never run since.

"Some of these cars had been assembled for the purpose of exhibiting with the view of raising money for their manufacture, and several of them were left on our hands in lieu of rental. They eventually found their way to the junk pile.

"A unique feature of this first show was an indoor automobile race meet, something never before attempted, and something which I do not think will ever be attempted again. And, at that, we got away with it, with the total casualties of one pair of broken spectacles belonging to an old lady spectator and a broken leg belonging to a man spectator. In reporting the races a Philadelphia paper of February 7, 1901, said:

"In the pursuit race for gasoline vehicles the Knox finally succeeded in overhauling the Columbia. The coat-and-vest race in which the contestants were obliged to dismount from their machines and take off their coats and vests and hang them up, later stopping and putting them on again, caused much interest. The Gasmobile succeeded in overtaking the De Dion-Bouton motorcycle after an exciting chase. The Gasmobile was also victor in a race with the Knox after the latter had carried away a section of the fence in the driver's attempt to hug the inside rail.

"This show was held at the Second Regiment Armory, February 4 to 9, 1901, and the cars exhibited were the Locomobile, Mobile, Columbia electric, Columbia gasoline, Foster steam, Orient Motorcycle, Orient Carriage, De Dion-Bouton, Marlboro, Century, Winton, Reading, Victor, Wall, Schwarz, Skean, National electric, Boston, Gasmobile, Thorngroff, electric ambulance, union motortruck, Wood's electric, Grouth, Standard and Farming electric."

Of that array, but two cars are seen in this, the nineteenth annual show. Several other shows were conducted by Le Cato, with varying degrees of success.

The great success of Philadelphia shows, however, as important industrial displays, dates to the period when their management was assumed by the Philadelphia Automobile Trade Association, the pioneer automobile business organization of the city and one of the oldest and most successful in the country. Hundreds of thousands of visitors have attended them and millions of dollars' worth of automobiles have been sold as the result of the stimulus given by these exhibitions.

Chassis Improved

Briscoe Also Puts New Sedan and Coupe on Market

The Briscoe comes out for 1920 not only with a much improved chassis and improved open touring car and roadster, but with an entirely new sedan and coupe, this being their first year for production of enclosed types.

The chassis is provided with extra long springs, insuring easier riding ability and with a complete, weighted three-bearing crankshaft.

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Dazzling Display Bewilders People

Continued From Preceding Page

With the exception of a few improvements on universal joints and wheels the under parts of the cars generally remain unchanged. Changes for the better in these, however, are sure to come. The engineers cannot get to every part at once, consequently something has to be neglected temporarily.

The preponderance of closed cars is a noticeable feature of this year's show. There have been heavy increases in the production of this type, both convertible and nonconvertible. Many plants that had never turned out a closed car before are producing them now and some manufacturers have decided to make them to the exclusion of all other types.

These radical body changes appear largely in the lower-priced line of cars and it is estimated that one-half of the models shown are closed cars, convertible or non-convertible.

Lines Are Same

While on the body subject there are a few other changes that are noticeable, mainly on doors, fenders, external lighting arrangements and cowl boards. The streamlines are but little changed from last year, the high hood tendency still prevailing. This type of hood has an angle meeting the top edge of the body. The windshields are not only much more in evidence than ever, but they have more substantially set in. Small, built-in side pieces attached to the windshields have been made a feature by some concerns and it is likely that this change will be universal in a few years.

Overhead valve engines are used by some makers for the first time, while those who have had this type of motor have made improvements, largely in the form of better lubricating apparatus. Several changes can be traced directly to the fuel problem, chiefly in manifold, folding, and virtually all engines have some method of heating the mixture. The lighting system, vacuum fuel feed, ignition, starting apparatus and detachable cylinder heads have undergone little or no changes.

Other Advances

There are many fine examples of advanced engineering in such new practices as bearing without shims and new designs of high-pressure oiling systems, improvements in valve gear, and freer use of aluminum and other metals to give lightness in weight. Most of these have come as a result of war experience and are chiefly noticeable in the product of those concerns engaged in war-munition work. There are more fabric diversions than formerly, and to many engineers it seems that this type will take the place of the all-metal joint for certain installations where the shaft angularity is not great.

Striped chassis, operating motors and other running parts all tend to live up the show in every part of the building.

Ten cars, new to Philadelphia shows are here this year, some of them absolutely new to the motoring public, having been brought out during the last year. Lack of room alone prevented the showing of at least a half dozen other new makes and restricted the number of cars to be shown by each exhibitor.

In addition to the large array of cars, a multitude of accessories is displayed by different dealers. They include everything from special tops, to lamps.

NEW SERIES ANNOUNCED

Studebaker Corporation Has Excellent Line of Cars in Field

The Studebaker Corporation announce their series '20' cars, comprising two chassis, one a special six and one a big six. The special six is equipped with a 20-horsepower split-head motor, of Studebaker design and manufacture, with improved carburetor and hot-spot intake manifold.

Its 119-inch wheelbase makes possible the comfortable, roomy five-passenger touring car body and the beautifully appointed sedan or coupe. Its standard equipment is complete.

The body is a beautiful Studebaker dark blue. The special six is built in five body styles—five-passenger touring car, three-passenger roadster, four-passenger chummy roadster, five-passenger sedan and four-passenger coupe.

ONE-TYPE CHASSIS

In Spite of This the Franklin Car Has Five Body Styles

The Franklin car is built in one type of chassis, fitted with five styles of bodies, a two-passenger roadster, a four-passenger roadster, five-passenger touring, four-passenger brougham and five-passenger sedan. This year's models involve considerable changes in body lines and equipment, as well as in the chassis. The body has been lowered about three inches in the top, made possible by a lowering of the seats. There are also additional refinements noticeable in the new models. The open and closed bodies are interchangeable and all open bodies are so designed that detachable winter tops can be fitted.

NEW MODEL IN "6"

Anderson Car Shows Great Development in Novel Body Types

In the growing class of six-cylinder cars comes the Anderson six, which appears in a new series model, some of the body types being strikingly unusual. It is built on one chassis frame, differing mainly in the motor on it. The wheel base of both models is 120 inches, one model being equipped with a motor having cylinders 3 1/4 by 4 1/2 inches, developing forty-four horsepower, while the other motor is 3 1/2 by 5 1/4 inches, developing seventy actual brake horsepower and having a three-bearing crank shaft.

Among the well-known mechanical features are Zenith carburetor, Connecticut ignition in one model and Bosch high-tension ignition in the other, Westinghouse starting and lighting system, Borg & Beck clutch, Durrston transmission in one model and Grant-Lees in the other. The motor used is the 7R Red Seal Continental.

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AMERICA LEADS IN AUTO DESIGNS

All Nations Look to New World for Ideas in Motor Manufacture

MUST BE DISTINCTIVE

As in most everything else, America leads the world in designing automobiles. Europe looks to us to set the pace because American social distinction, prestige and reputation make it absolutely necessary to use the most extreme judgment in the selection of our motors.

American cars are designed with good taste, exclusiveness, a car that is decidedly out of the ordinary, one that is a thoroughbred from headlight to tail-light, thoroughly at home on the avenue or boulevard, in company with the foreign thoroughbreds; one that commands a second look and places its owner in motordom's hall of fame as an individual who knows motorcar better and uses rare judgment in their selection—a car that can ramble along at a crowded traffic pace or be quick as lightning on the getaways and fully equal to spirited brush with a neighbor or friend.

ROADSTER IS ADDED

Columbia Six Makes Departure in Production This Year

The Columbia Six has been seen here before and makes a departure this year by adding a roadster for two passengers to the line, built on the same chassis as the touring and closed models, which include a five-passenger touring, a four-passenger sport model, a five-passenger touring sedan and a coupe.

The spring suspension of Columbia cars is unique in possessing what they call a "nonsynchronizing" principle, which they claim gives it superior riding ease.



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Removes road tar, cleans, polishes and protects the polish of your automobile in 3 minutes for 2 cents; will also clean up your furniture, woodwork, range, linoleum, mirrors and windows; washes soap of water. On sale at 200 garages and 600 dealers. Price by parcel post, 65 cents. Phone for demonstration, Tioiga 3998.

Factory, 4302 N. 3d St., Phila.
Agents wanted outside of Phila.

STANDARD EIGHT A Powerful Car

See it at the Show

THE Standard Eight is a powerful car which does not depend on weight to keep the road.

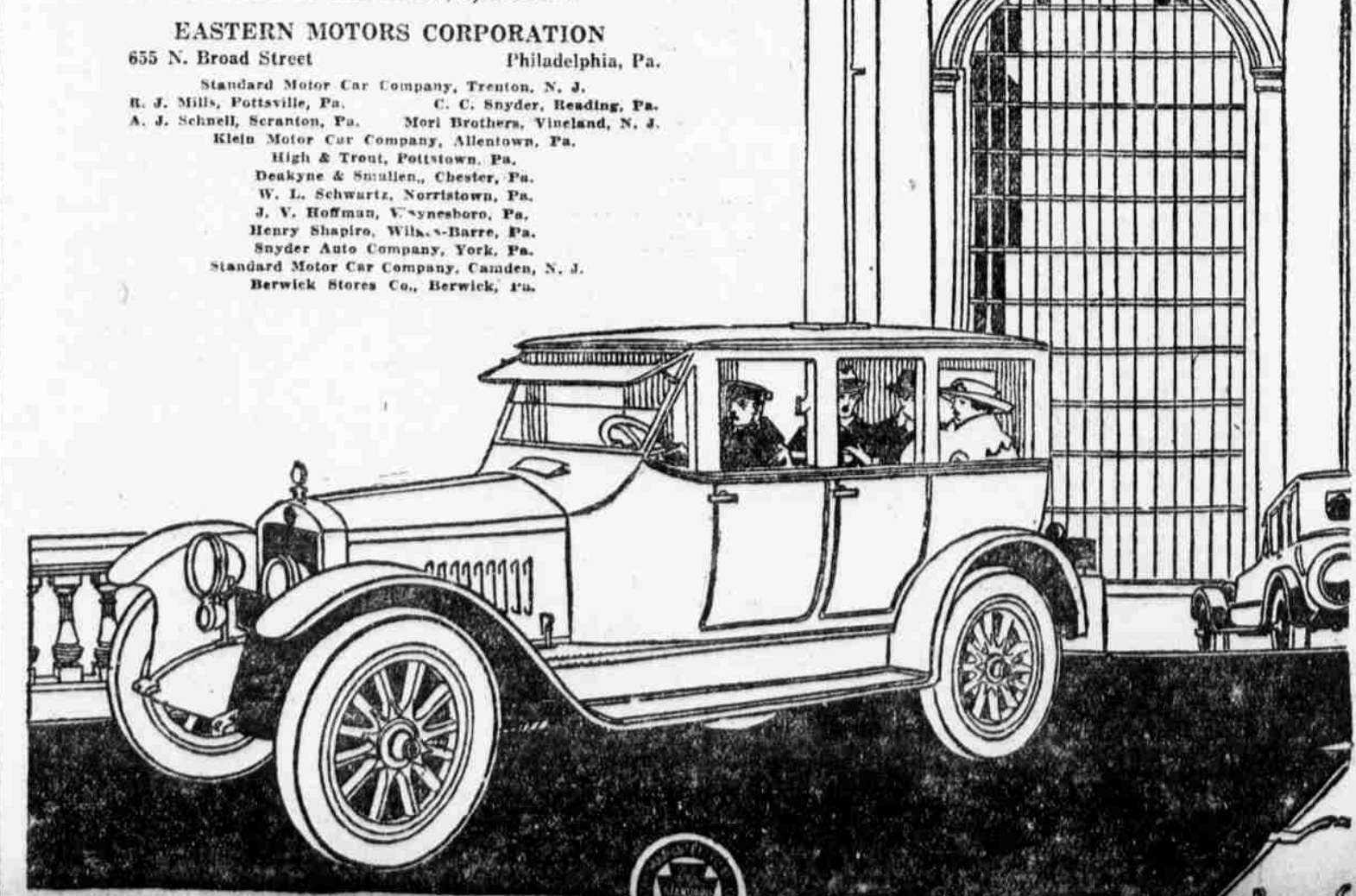
Balance, suspension, and right proportions have been so perfectly coordinated with power that the Standard Eight's riding comfort leaves nothing to be desired.

Thus that sense of full and unlimited power which every motorist covets because it is the base of all motoring pleasure is obtained without sacrificing comfort in riding.

See the Sedan and other new models at the center of the show, space 30.

EASTERN MOTORS CORPORATION

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Scripps-Booth

Yes, if such a thing were possible, Philadelphia is even more positive than New York in its praise of the 1920 new 6-cylinder Scripps-Booth.

See the animated chassis in our exhibit—tells more plainly than words that in advanced engineering it is the surprise car of the show.

Sedan, Coupe, Sport Touring, Roadster

SPACE 39 SHOW

La Roche Bros., Inc.
1214 N. Broad St.

