GREAT ADVANCE IN EQUIPMENT IS SEEN

Visitors to Brilliant Automobile Show Amazed at New Features.

RADICAL CHANGES ARE FEW

Devices Which Contribute to Efficicy and Ease of Control Are Feature of Exhibit-Portland Folk Attend.

NEW YORK, Jan. 18 .- (Special.)-Visitors to the 13th National automo bile show, which closed tonight after though a few had the levers at th

Gasoline motor builders have something new to show in the way of six-cylinder machines, while several radical designs in valve construction are on exhibition. There is one motor in particular which has been taken up extensively and discussed by the American Society of Automobile Engineers. It has crescent-shaped sliding valves, which operate in grooves cut into the cylinder walls. These valves are actuated by means of box cams, one set on either side of the cylinders. This new motor is said to have extraordinarily high compression, and to develop great power at moderate speeds.

Left-Hand Drives Increase.

While the older motor companies save not made any startling changes have not made any startling changes in essential design, they have made their motors extremely neat and clean in appearance. This includes the complete inclosing of the valves in cages, covering the electric wires in conduits and providing better means of mounting the intake and exhaust manifolds, the magneto and the pumps.

Last year only 13 per cent of the cars shown had the steering wheel located on the left-hand side of the car. In the majority of these cases the control levers were centrally located, although a few had the levers at the left.

PLEASURE CAR DIVISION OF ANNUAL AUTOMOBILE SHOW CLOSES AFTER WEEK

Leavitt Manager in Portland Says Mortgaged Homes Will Not Result.

APPLICANTS CAN AFFORD

Business Standing of Prospective Buyer Investigated; Merits of Scheme Revealed.

case, why is it that they have not purchased before? The average man spends a certain portion of his income on what may be claimed to be luxuries—that is, pleasures for himself and family. Many have desired to spend this money motoring, but the original investment has deterred them. Our plan permits them to enjoy automobiling and merely means to them a diverting of the purchase price of other luxuries to the enjoyment of the motor car.

"The same pessimists have contend-

motor car.

"The same pessimists have contended that the expense of the motor car will usually take the surphis money of a man who only can afford to buy a machine by the means we offer. I contend, and always have contended, that if an owner takes the proper care of his automobile, that the expenses will be much cheaper than those of his other pleasures. In support of this contention I would like to quote the following letter received from Stanley G. Scovern, as owner of an Overland. This letter tells of a service that can be enjoyed by every owner of an Overland. Scovern writes:

Actual Expense Shown.

Actual Expense Shown

'It will be of interest to you to kno from actual use how much it really costs to run a model 46 Overland, such as I am driving around the city at present, and for that purpose I append herewith the expense incurred by me during the six months that I have been Strange things often happen in the operating this machine. From April 14, automobile business. The salesman's 1911, until October 14, 1911, during

(100D) YEAR No-Rim-Cut Tires

Used as Equipment on Largest Single Shipment of Automobiles Ever Made

Nothing but GOODYEAR TIRES on 375 Buick Automobiles Shipped in One Trainload to the Howard Automobile Co., of San Francisco.

This Letter Tells Why:

HOWARD AUTOMOBILE COMPANY

January 9th, 1913.

Goodyear Tire & Rubber Company, Van Ness Avenue & Sutter Street, San Francisco, Cal.

Gentlemen:

We take pleasure in advising you that the 375 Buick automobiles in our special trainload of 75 carloads, which has just arrived, were all equipped with Goodyear No_Rim_Cut_Tires.

We have had so far this season, approximately thirteen hundred 1913 Buicks equipped with Goodyear tires, our reason for using your tires in such large quantities being that we know of no other tire that would give us the satisfaction and service we are now getting. In fact, we have spacified a preferance for Goodyear equipment for the last five years.

Assuring you again of our appreciation not only of the quality of your tire, but of the service extended to Buick owners as well as our-selves, we beg to remain

Yours very truly,

Howard Automobile Company,

MILEAGE TESTS WIN FOR GOODYEAR

For years and years we have built tires solely by the mileage test. And motorists are coming more and more to the making of mileage comparisons. Nothing in the world accounts for Goodyear popularity save the lessened cost per mile.

THE GOODYEAR TIRE & RUBBER CO., Akron, Ohio This company has no connection whatever with any other rubber concern which uses the Goodyear name

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MADISON-SQUARE GARDEN EXHIBIT, WHERE ACME OF MOTOR CAR PERFECTION LURED THOU SANDS OF VISITORS.

seen that about 30 per cent of the cars at the advance that has been made during the last season in pleasure-car of these cars which retain the right-construction. This does not mean that many radical changes have been made in mechanical construction, but refers more particularly to the very complete equipment that is being offered.

This has been referred to as "an other side of the car.

equipment that is being offered.

This has been referred to as "an equipment year," and the show visitor learned the truth of this phrase in no uncertain manner. Investigation showed that fully 30 per cent of the manufacturers exhibiting here are fur-nishing their cars with more essential accessories than ever before and more than ever dreamed of only four years than ever dreamed of only the ago. This equipment does not include a lot of superfluous and useless parts, but such devices which make for more efficient operation and ease of control of the car, with less labor for the

The show management struck a popthe show management struck a popular cord when it announced one admission price for both parts of the show — Madison Square Garden and Square Garden and Grand Central Palace. Every afternoon and night both places were noon and night both places were exhibited, more results obtained and larger crowds attracted than ever before. It is estimated that fully 10,000 more visited the show than last year.

Scheme Debatable at First.

"It was a debatable question as to the practicability of the scheme from the business standpoint," said Manager Howe, in discussing the result of the determination of the company to follow the new procedure. "There is the same care of his car as a larment does his horse, there would be no big maintenance bills."

PHILOMATH AFTER SCHOOL the practicability of the scheme from the practicability of th

Pacific Const Folk Present. Following a week of unvarying suc-ess, the pleasure car division of the show closed tonight. Next week the commercial motor vehicles will mo-

commercial motor vehicles will monopolize the spotlight.

Among the Portland and Pacific Coast people who visited the show were H. L. Keats, the Chalmers and Peerless distributer for the Northwest: F. W. Vogler, Hudson and Reo distributer; L. H. Rose, the Flanders distributer; the concise and incident flanders, the concise and inci

air starter, then came the spring starter and then that depending upon the explosion of acetylene gas in the cylinders to start the motor. At last year's show 13 per cent of the cars on of handling it here.

Cole Technical Bulletin Used As Text Book

Professor of Physics in Indiana High School Impressed by Publica-tion and Authorizes Its Adoption.

NDIANAPOLIS, Ind., Jan. 18 .- (Spe. cial.)-The Cole Technical Bulletin, a comprehensive talk on the construction of the automobile, has been gage his home for the luxury of an automobile.

Motor Car Company.

E. R. Glen, professor of physics at the Bloomington High School, came into possession of the Technical Bulletin. He immediately provided copies for the students as a supplementary

orman Devaux.

Winstock, of San Francisco.

A. Lord, Los Angeles: Ralph Tuttle.

Walla Walla.

Hinstrating the trend toward selfstarter, where only three years ago
only two manufacturers furnished selfstarters with their cars, this year there
are scarcely a dezen out of nearly 200
pleasure cars that are not equipped
with some form of self-starter. These
starters may be divided into five
classes, as follows: Electric, compressed air, acetylene, gaseline or other
volatile liquid and spring starters.

The first type to appear as an inthe first type to appear as an inthe first type to appear as an inthe spring

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week and became so enthusiastic about the captosion of acetylene gas in the cylinders to start the motor. At last year's show 33 per cent of the cars on exhibition were equipped with a cetylene starters, 41 per cent with compressed are or gas and only 35 per cent with compressed are or gas and only 35 per cent of the cars on exhibition were equipped with a cetylene starters. This year it is estimated that more than 50 per cent of the cars have electric starters and the week for a brief conference with Manager Roberts, of the Portland lighting systems.

Wire Wheels Are Adopted.

One important trend in design is seen in the adoption of wire wheels by several carbuilders. Wire wheels have been guite common in Europe for several years, but it is only within the last season that they have been seriously considered by the American manifest energy of the season that they have been seriously considered by the American manifest energy of the same of the cars are showing those of the wire yould act and the proposed of tail. I have been shipled with the manufacturers with the view drawing that is, while to ask and the proposed of the with the with death the motor. At last year's show guily one of the cars and the proposed of the within the starters and the proposed of tail, and their through the distribution of the cars have electric starting and the trails and the the motor car has been on exhibition were equipped with the distribution of the cars of the with the distribution of the cars of the within the sit is personne when the with the with the distribution of the cars of the with the distribution of the cars of the within the same of the with the manufacturers with the view death that more of the cars of the with the distribution of the cars of the with the distribution of the cars of the within the more of the within the more of the with the manufacturers with the view than the with the manufacturers with the with the distribution of the cars of the wit is spice on which the manufacturers with the with the manufactu

most brilliant and successful ex- of the driver. This year it will be time duties. The unusual, the unex- ly in my business of collecting and cov-

predicted that scores of people not in a position to own an automobile would immediately apply for a Toledo machine. Thus far this theory has been cock-hatted. Before letting a car out in time, the applicant's financial itanding is thoroughly investigated in the country of course, the case cited is a little out of the ordinary. However, it n time, the applicant's financial tanding is thoroughly investigated. If it is found that he has an insufficient income, he of course is turned down. To date Howe's force has been unable to find one of those who would mort-

were those who thought that this an nouncement would create a rush of persons to obtain a car whose finan-cial position would not warrant such a purchase. Undoubtedly there are who huy motor cars who cannot

some who huy motor cars who cannot afford them, but I have been surprised since we made the decision to find that, although many have come in to take advantage of the offer, that we have yet to discover the first one whom we consider not in a position to own an automobile."

Evidently the public is not going so crazy over automobiles as many would have us believe. While admitting there are a certain number who buy when they should be thinking of other investments. Howe declares that the per cent is so small as to be almost unnoticeable. Pessimists say that the motor car is sending the Nation to its ruin, that people are mortgasing their homes and otherwise going hopelessly into debt, just to get hold of a vehicle that will run by moving a few levers.

Applicants Standing Good.

"Like every other business in ex-

"Like every other business in ex-ending credit," continued Howe, "we must know that the person's credit is good; that he is in a position to fulfill his obligations. We are not seiling

pected, occurs frequently. Dealers amaintain that it has ceased to be a "game." Notwithstanding this opinion, the elements of a "game" continue to cling to the business, albeit not to such a marked degree as two or three years ago. Therefore, paradoxical as it may seem, the new credit plan announced by J. W. Leakitt & Co. falled to produce the surprise anticipated.

When Fred Howe, the Leavitt manager in Portland, announced that Overlands would be sold on credit, it was predicted that scores of people not in a nosition to own an automobile would them.

"Now." concluded Howe. "It does not take a great mind to perceive that an Overland is a comparatively inexpensive luxury. Of course, the case cited is a little out of the ordinary. However, it is by no means the exception. There are hundreds of Overland owners who operate their cars on little or nothing if a man is careful in driving and takes the same care of his car as a farmer does his horse, there would be no big maintenance bills."

PHILOMATH, Or., Jan. 18 .- (Special.) —At a meeting of the Philomath Com-mercial Club on last Monday evening 32 citizens were named as a commit-tee to take up the matter of securing the new Federated College for Philo

SNOW THIRTY FEET DEEP Southern Oregon Expects Early

Worst Part of World Tour

Found in United States. **AUTOISTS DENIED SHELTER**

Feminine Motorist Tells Thrilling Tale of Battle With Raging Blizzards While Crossing New

Determination to complete their world tour brought Mrs William A. Hall, of New York, and her son, Mel-vin, Into a series of motoring adven-tures that at times bordered on the

tures that at times bordered on the desperate. When Mr. Hall hurried home from Europe expecting to enjoy a family reunion at home he learned that his wife and son were fighting blizzards with their Packard in the Rocky Mountains. He met them at Colorado Springs, but his attempt to persuade them to give up the last leg of their 40,000-mile trip was not successful. They have arrived home safely.

Touring through Europe, the Orient, the Philippines and Japan brought no such vicissitudes as were encountered by Mrs. Hall and her son in crossing the United States, by way of the southern route. Snow storms and zero weatern route. Snow storms and zero weatern ern route. Snow storms and zero wea-ther, out of season, upset their sched-

Mrs. Hall set forth vividly in a let-ter to Mr. Hall the conditions they have faced while driving through New Mexico.

Mexico on Way Home.

Mexico.

Zero Weather Trying.

"We have had about the most strenuous times of our lives in this part of the trip," she wrote. "It is only a few weeks, yet it seems centuries since we left San Diego and entered this cil-

left San Diego and entered this cilmagte that has withered and frozen us
with zero weather and blizzards.
"It is enough of an undertaking at
any time to cross the continent, but
only mad folk like ourselves would attempt it at this season. Not that I
would give it up now, or would have
in the beginning. But to start off in
the morning with no singler from blizrards facing the prospect of walking

of being left out over night. But only go on and on for hours, without meeting anyone or coming to a habitation. You get out of water, out of gasoline, even out of food. From Springerville to Albuquerque it is over 100 miles without a sign of life, and most of the way over such roads as would wreek most automobiles.

would wreck most automobiles.
"In spite of diagrams, maps and every safeguard possible, we lost our way and found ourselves at night going deeper and deeper into a canyon. We discovered the camp-fire of some Mexicans, whose Spanish and English we understood enough to know that were 25 miles from Albuquerque, Heil's Canyon, which led on and on some mines.

Squaw Refuses Shelter,

"The wonderful Packard struggled back again, through snow fords, rocky boulders and arroyoes. Never yet has it gone back on us. We had been five hours going 18 miles in a snow storm, when a squaw wife refused us shelter. Forty-two miles ahead of us lay a road Forty-two miles ahead of us lay a road over a pass, the worst stretch in the country, and blocked with snow. I was frantic. No amount of pleading affected the Indian woman, Finally I went to a hut nearby and found the half-breed daughter, who came over to intercede. To stay out in that storm meant only one thing.

"Finally we were given two rooms.

"Finally we were given two rooms, and there we remained two days during the blizzard. We lived on our tinned Ing the blizzard. We lived on our tinned supplies, soups, crackers, sardines and meat paste. I was afraid they would turn us out if we asked for anything. I did all the work and then paid them \$5 when we left, the roof they had so grudgingly given us. I had a miserable awakening toward the spirit one meets out here. It is not pleasant for an American to think about after the courtesy and desire to please that one encounters everywhere in the Orient."

Natives of Burma have superstitious reverance for a huge boulder which is so delicately poised on the edge of a rounded silir on Keinus Heights that it trembles in his wind. They believe it is held in position by a hair of Buddha.



Automobile

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Lubrication

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