(Editor's note: George W. Sutton, Jr., is one of the best known writers on automotive subjects in the country. His articles appear in the leading automobile and technical papers and in many magazines. The following article is submitted by him after a recent and exhaustive study of general automotive conditions.)

Something new and radically different is impending in the automotive field and the general opinion of those who are closes to the situation is that we shall soon see an entirely new type of light motor car, built in quantity production, which will incorporate many of the features of the European built light cars with radical undsen, Ellsworth, and Nobile. American adaptions any changes to suit them for our requirements.

It is known that certain tire manufacturers are equipped to turn out balloon tires of a smaller present in use in this country. These tire builders do not go to the expense of developing new tire sizes unless they see a demand for them looming up in the near fu-

There is a dstinct impression that the Peugeot Brothers left. something more than casual in- ty for safety and road balance. terest back of them in their recent invasion of our shores with a diminutive open car. Fiat is reputed to have been negotiating with manufacturers in this country for the building of the small 5 horse power Italian car.

Several American manufacturers are accredited with having light cars already on the road for testing and experimental laboratories are reputed to be working feverishly on a type of car which will bring us an entirely new range of performance in automobiles of somewhat of our present dimensions of our present light cars but with far greater speed, greater climbing ability, vastly increased fuel economy, and materially improved body lines.

The market for light cars is shifting, General Motors with the Chevrolet, and Willys-Overland with the Overland, have made substantial production gains in the past two years in the low priced car field.

percentage in the fifty per cent of around 68 inches total height from our total motor car output which is held by the light automobile. They have offered material; and fundamental improvements in the light car which the auterican car buying public is expecting.

finite daily proof that the light able to materially outclimb any car can be made to give thirty of our present light cars.

miles to the gallon of gasoline. eW have no light cars in this country which can be depended upon for this mileage at the present time. But our engineers can utilize these principles of design which have made this mileage possible and still retain the performance possibilities which we demand, European light cars can travel up to sixty miles an hour. It is unusual for any of our light cars to attain any such speed with standard equipment.

They have only to utilize the European principles of small bore and long stroke, to get a far greater power development than we are getting at present with our typically square, light-car power plants, Such motors will give greatly increased fuel mileage, But with the use of such motors will come necessity for more advanced construction than is being used at present. The motor in our present day small car, taken as an average has seen very little real imporvement in the past several years. We shall expect forced feed lubrication, better carburetion, and improved cooling systems. Our users will never be satis-

fied with the frequent shifting of gears which is accepted by the European drivers. If there is to be a new type of car it will have to incorporate excellent hill climbing ability. Here, our engineers have been working to develop greater torque in their motors for this means less gear shifting on grades and in heavy pulling.

We shall require other motor changes as well. At the present time. American engineers, working to get a low, compact light motor have been content to let the lower end of the piston skirt slide down past the lower end of the cylinder walls at the end of the down stroke. This has resulted in piston slaps and in a far too rapid deterioration in the power plant. Longer cylinder walls, higher motors which will be compact in end to end dimensions rather than in top to bottom figures are likely. In this we shall be following acceptable points in European manu-

Lower bodies are also a certainty if the new American built light car follows European lines.

Doughton & Sherwin, Hard-ware, 286 N. Com'l St. Hardware, Builders Supplies, Paints, Varnishes. Give us a call, you'll find

Buster Brown Shoe Store. High class, stylish looking, comfort giving, long wearing shoes for the least money. Go and be convinced, 125 North Com'l St. (\*)

### Norge's Flight Holds Lesson For Cold Weather Motorists



pearance of the giant dirigible successfully accomplished the and steel constructions have been a recent severe snow storm

This remarkable photograph of overhauled and the engines supthe Norge hovering over its moor- plied with a fresh cooling mixture ing mast at Oslo, gives an unusu- consisting of water and 30 percent ally clear idea of the actual ap-glycerine." The last mentioned provision holds particular interest which, under the guidance of Am- for American motorists, since it is only in the last few months that a commercial compound of distill-Trans-Polar flight. No detail was ed glycerine has been made availoverlooked in the equipping of the able as an anti-freeze solution for Norge for its epic adventure, and radiators, and used with success it is interesting to note in a dis- in the almost arctic conditions endiameter than any which are at patch published in the New York countered by motorists this winter, Times on May 15th that just prior and illustrated insert, showing a to starting, "the engines, envelope scene in Washington D. C., during

> capacity, it will be necessary to everyone else at the present time. kep the car weight down and this will make lower bodies a necessi-

Already one American manufacturer, in a special model, has achieved a total height from the ground to the top of the body of but 64 inches. We will probably not go this far, because it will be necessary to maintain proper head room, but from 66 to 68 inches may be expected and this means a car that a man of ordinary height can easily look over while standing at the curb. Such a car will be materially lower than any light car we have on the market at the present time.

Piecing together the requirements of a typical American light had greater effect in placing Vercar built after European lines, we mont before the people of the should get a car of about the same wheel base as our present light mobile." cars, with standard tread, wherein it will materially differ from European light cars, a motor of considerably less piston displacement than any of our present stock models but with considerably greater maximum power development, tire sizes perhaps as small Today these cars occupy a high as 27 inch diameter, and body of

This car should seat five people with comfort. It should be able to on account of snow. ght car which the american car uying public is expecting.

From Europe we are getting deditions, and should be desired to the light.

It will not be the lowest price car built by any manner of means and yet it will not be disproper tionately high in cost. It will have four-wheel brakes to take care of its increased performance range It will have an irreversible steering device, and it will be quite different in the essentials of lubrication, cooling, ignition and carburetion from our present standard models.

With increased power and speed one in the industry is asking

H. F. Woodry & Son, 271 N. Com'l. St., furniture store. Bargains in furniture of all kinds. Agent for Lang ranges, best made. Also auctioneers.

#### MOTOR CAR AIDS IN DEVELOPING NATION (Continued from page 1)

other state in the Union. The vistas presented are ever-changing, because the roads are not merely concrete race-tracks, but rather well-surfaced highways leading to most interesting points in all parts of our state; and it is my opinion that no agency has United States than has the auto-

H. T. Love, the jeweler, 335 State St. High quality jewelry, silverware and diamonds. The gold standard of values. Once a buyer always a customer.

HOW THE ROADS ARE

Crater Lake Highway

Prospect, Fort Klamath: Closed Redwood Highway Connecting With Road to

Oregon Caves Grants Pass, Kerby, Waldo; Graveled road in good condition. Kerby, Oregon Caves: Road in good condition, Oregon Caves now open to public.

McKenzie Highway Eugene, Belknap Springs, Sisters, Redmond, Bend; Macadam.

The Cherry City Baking Co. bread, ples and cakes are of highest quality. One of Oregon's most sanitary bakeries. Visit it. Worth while. A Salem show place. (\*)

Linn county prune growers What manufacturer will build propose to build large cooperative it? This is a question which every prune dryer.

been started by the English automobile journal, The Motor The object of the tests would be to determine the most suitable types of warning light to be used ooth during the day and during the night, as well, it is said to stimulate interest in this type of

Magazine Urges Test to De-

termine Best Devices to

Insure Safety

NEW YORK, June 5.—A move-ment toward testing and approv-

ing various types of automatic and

semi-automatic signaling and warning devices in England has

accessory which would add greatly to the drivers' convenience and safety in traffic. "Signaling devices," says The Motor, 'are just beginning to catch on' among motorists. There s a choice of a dozen different direction indicators and warning lights, while new ones are appear-

ing frequently. We notice, how-

ever, that there is a lack of uni-

formity in the type of signals and

recognized signaling code. "It is conceivable that much ineresting data along these lines could be obtained from tests. For St. example: One manufacturer has Best quipped auto accessory store found that a green light is more visible in the day time than a red light; it is therefore more suitable for giving signals during the day in either a forward or rearward direction. There is, however, the and up to date. Your needs Mr. chance that the use of green lights Tyler's concern. 157 S. Com'l. St. on the rear of the car after dark

would result in confusion. "Again, there should be an effort made to devise standard sigit seems that there is need for a nals that could be readily understood by police, foot passengers and other traffic, which would eleminate confusion at crossings and intersections.

"There is urgent need for equipping all 'blind' vehicles with direction and warning indicators. By 'blind' vehicles we mean those in which it is not easy to see the drivers, as in large inclosed cars, motor omnibuses, motor coaches, tramcars, hooded vans and lorries. Getting behind a large car or an omnibus blocks one's view of the road, while the intention of the driver to turn left or right, or to stop, can only be guessed if no mechanical warning signal is shown.

"When the more courteous driver of one vehicle hears the warning toot from the driver of another overtaking him, he gives the signal to come on by waving his arm likely to be endangered by the approach of another, when he extends a warning hand. In the case of many large vehicles, however, the drivers' signals are invisible. and there seems a call for some form of mechanical indicator to give warning to those behind. Many an accident has been caused

#### by a motor omnibus pulling out suddenly from the side of the road the driver's signal, even if he gives one, being invisible to traffic behind him. If, however, the motor omnibus driver operated a direc-

vehicle such accidents would be "Direction signals are not only

and to foot passengers contemplating crossing the road. Of course, a driver could signal with his hand, and this, by the way, is compulsory in certain provincial cities; but, except in these cases, it is not so regular a practice as it should be. With an automatic or semi-automatic device most drivers would acquire the habit of giving warning of their 'In a test such as we propose

of operation of signals. The trial in New Zealand, is visiting this should take place in daylight, be- and other countries in response to cause it is more important in invitations from them asking that view of the greater amount of American manufacturers send a traffic—to give adequate signals delegate to a series of transport in the daytime, but their visibility conferences which are being held at night should also be tested. In in Oceania and the Orient. The the case of devices which are elec- first of these is being held in contrically lighted this could be taken nection with the International Moor granted, but where a mechanitor Show in Melbourne, Australia. hand, for instance, might easi-

he seen in the daytime it might advancing rapidly in Australia and be invisible at night unless it were New Zealand. There are now 1100 buses in these two countries, 150 of which are operated by traction Its W. Jorgensen, 190 S. High companies. The registration in Parts for all makes of cars. New Zealand alone is 87,000 motor cars and 18,000 trucks.

liable service the rule. Tyler's Drug Store, where increasing numbers prefer to trade. varied stock is kept complete

Newton, under-secretary of the department of Internal affairs of to know you have good tires on the New Zealand government. Portland-Steamer Seiyo Maru takes 227,500 bushels wheat for

New Zealand Reported Also Progressing in Automotive Industries of value to other traffic, but to policemen, officials on point duty

(A. D. N. Service)

NEW YORK, June 5. Seizing pon motor transport as a method for rapid development of their resources, New Zealand and Australia are continuing to be leaders in the mtor market, according to report just received by the Naional Automotive Chamber of Commerce from Walton Schmidt, who is representing that organization on the Pacific continent and

Mr. Schmidt, who is at present

in this section. Prompt and re-Two recent steps which indicate the progress of motor travel in that country are the organization by J. S. Cousins of twenty-nine groups of dealers into the New Zealand Motor Trade association, and the preparation of a new mo-(\*) tor vehicle code by Honorable H.

## Capital Oregon Special



tion indicator at the rear of his

more avoidable.

intention.

ill's minated in some way."

FOR TIRE **ECONOMY** 

Now is the time for Economy in Rubber. Oregon Special Rebuilt Tires will solve your tire problem. Why pay more?

## CAPITAL TIRE MFG. CO.

205-245 Center-Telephone 398. H. Steinbock, Prop.

Hereafter

AJAX

will be known as the

NASHI

Light Six

# Rickenbacker

There is nothing so satisfying as

your car. The Malcom Tire Co.;

Court & Com'l. can supply you

Crane- Health resort is to be built at Warm Springs, near here.

See them.

Before Your Vacation

HAVE YOUR CAR

Electrically

Overhauled

It may save you lots of

trouble on the road and the

expense will not be very

An Electrical Overhaul Will

Lengthen the life of your car

SEE US

We Are Auto

Electricians

E. H. BURRELL

**Battery and Electrical Service** 

Telephone 203

great.

238 North High Street

# Reduced Price on this Great Six

The more you study the Rickenbacker Six, the more you will be amazed at the exceptional value offered at the new and reduced prices. Reductions range from \$100 to \$200.

There are other good Sixes on the marketlots of them - but you will not find one in which are incorporated so many advanced engineering refinements as you will find in the Rickenbacker.

increased volume makes possible these new and reduced prices. Come in today. Convenient terms.

F. W. Pettyjohn Co.

365 North Commercial

## PRAISE SO WIDELY VOICED THAT ALL MAY HEAR

In the unflagging brilliance of Oldsmobile performance; in the luxury of its riding qualities; in its effortless control and uncanny inclination to hold to the road-Oldsmobile owners find endless cause for glowing praise. This praise, so widely voiced that all may hear, ever-increasing thousands wisely

> COUPE \$1105

CAPITAL MOTORS

BIDDY BISHOP, Mgr. Telephone 2125 370 N. High St.

OLDSMOBILE 

Important! The phenomenal success of the Ajax Six and the great size the business has

attained in less than a year, with well over\$27,000,000 worth of carsalready shipped, has made advisable a closer consolidation of Nash and Ajax manufacturing operations.

With this in view the Ajax Motors Company, till now a subsidiary of The Nash Motors Company, has been entirely absorbed by the parent Company. And in accordance with this procedure

the name of the product, Ajax Six, is herewith changed to Nash Light Six. Sothat Nash models are now available in 3 Series—differing as to wheelbase but identical in their high standards of workmanshib-

-the NEW Light Six series (formerly the Ajax Six); the Special Six series; and Advanced Six series; embrac-ing 16 different models with a price range from \$865 to \$2090 f. o. b.

This announcement of the change in name from Ajax Six to Nash Light Six also marks the greatest five month period of business in Nash history.

The upward soaring demand during January, February, March, April and May drove total sales and production to a figure approximating 70% of the total sales for the whole of last year.

KIRKWOOD MOTOR CO. Telephone 311

311 N. Commercial